

197
No. 2232

United States
Circuit Court of Appeals

For the Ninth Circuit.

Transcript of Record.
(IN TWO VOLUMES)

FRED STEBLER,

Appellant,

vs.

RIVERSIDE HEIGHTS ORANGE GROWERS' ASSO-
CIATION, a Corporation, and GEORGE D.
PARKER,

Appellees.

VOLUME I.

(Pages 1 to ~~368~~, Inclusive.)

684

Upon Appeal from the United States District Court for the
Southern District of California.

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1917

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INDEX TO PRINTED TRANSCRIPT OF RECORD.

[Clerk's Note: When deemed likely to be of an important nature, errors or doubtful matters appearing in the original certified record are printed literally in italic; and, likewise, cancelled matter appearing in the original certified record is printed and cancelled herein accordingly. When possible, an omission from the text is indicated by printing in italic the two words between which the omission seems to occur. Title heads inserted by the Clerk are enclosed within brackets.]

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Names and Addresses of Attorneys.

For Complainant:

FREDERICK S. LYON, Esq., 504-7 Merchants
Trust Building, Los Angeles, California.

For Defendants:

NICHOLAS A. ACKER, Esq., 68 Post Street,
San Francisco, California.

WM. F. BOOTH, Esq., 68 Post Street, San
Francisco, California.

*United States Circuit Court of Appeals for the Ninth
Circuit.*

FRED STEBLER,

Complainant and Appellant,

vs.

RIVERSIDE HEIGHTS ORANGE GROWERS'
ASSOCIATION et al.,

Defendants and Appellees.

Stipulation [Under Rule 23].

It is hereby stipulated and agreed by and between the parties, by their respective solicitors, that in printing the Transcript on Appeal in this case the Clerk of the court need not print the following portions of such record, but that each party may refer to such portions of the record and put the same in their briefs if they so desire, in the same force and effect as though printed, to wit: The title of the cause, not more than once, particularly omitting the same on pages 23, 39, 41, 42, 43, 46, 268 and 611; the citation appearing on pages 6, 7 and 8; the endorse-

ments appearing on pages 20, 37, 44, 45, 184, 198, 220, 263, 264, 265, 266, 267, 575, 596, 597, 608, 609, 610, 806, 812, 818 and 824; subpoena ad res. and marshal's return, pages 21 and 22; certificate, grant original Strain patent, page 242; replication, page 38; certificates of notaries, pages 180, 181, 531, 532, 800 and 801; assignments, pages 185 and 186; findings of fact in Pioneer Fruit case, pages 187-198, inclusive; original Strain Patent, pages 243, 244, 245 and 246; pages 224, 249, 250, 255, 256 and 257 of the Transcript of Record; duplicate copy of Strain Patent and Strain Re-issue Patent appearing on pages 258, 259, 260, 261 and 262; notice of allowance, Reyburn application, pages 297-298, inclusive; concession of priority and assignment by Reyburn, pages 802-805, inclusive; petition for allowance of appeal, page 817; order allowing appeal, page 820; bond on appeal, pages 821 and 823; certificate of clerk to transcript, pages 826 and 827; the several orders extending time for filing transcript in this court.

This stipulation shall be filed by the clerk, but need not be printed as a part of the transcript of record.

FREDERICK S. LYON,

Solicitor for Appellant.

N. A. ACKER,

Solicitor for Appellees.

[Endorsed]: No. 2232. United States Circuit Court of Appeals for the Ninth Circuit. Fred Stebler, Complainant and Appellant, vs. Riverside Heights Orange Growers' Association et al., Defendants and Appellees. Stipulation. Filed Dec. 30, 1912. F. D. Monckton, Clerk.

*United States Circuit Court, Southern District of
California, Southern Division.*

IN EQUITY.

FRED STEBLER,

Complainant,

vs.

RIVERSIDE HEIGHTS ORANGE GROWERS'
ASSOCIATION, GEORGE R. PARKER
and PARKER MACHINE WORKS,

Defendants.

Bill of Complaint.

To the Honorable the Judges of the Circuit Court
of the United States for the Ninth Circuit,
Southern District of California, Southern Di-
vision:

Fred Stebler, a citizen of the State of California
and resident of Riverside, California, brings this his
bill of complaint against Riverside Heights Orange
Growers' Association, a corporation organized and
existing under and by virtue of the laws of the State
of California, and having its principal place of busi-
ness in Riverside, California, George D. Parker, a
resident of Riverside, California, and Parker Ma-
chine Works, a corporation organized and existing
under and by virtue of the laws of the State of Cali-
fornia, and having its principal place of business in
Riverside, California, and thereupon, complaining,
shows unto your Honors: [9*]

*Page-number appearing at foot of page of original certified Record.

I.

That heretofore, to wit, prior to the 28th day of April, 1902, one Robert Strain, of Fullerton, California, was the original, first and sole inventor of a certain new and useful FRUIT GRADER, not known or used by others before his invention or discovery thereof; or patented or described in any prior publication in the United States of America or any foreign country before his invention or discovery thereof, or more than two years prior to his application for letters patent thereon in the United States of America, as hereinafter set forth, or in public use or on sale in the United States for more than two years prior to his said application for letters patent of the United States therefor, and not abandoned.

II.

That said Robert Strain so being the original, first and sole inventor of said Fruit Grader, to wit, on the 28th day of April, 1902, made application in writing, in due form of law, to the Commissioner of Patents of the United States of America, in accordance with the then existing laws of the United States of America in such case made and provided, and complied in all respects with the conditions and requirements of said law, and thereafter, and prior to the 9th day of June, 1903, by an instrument in writing, in due form of law, duly signed by said Robert Strain, and by him delivered to your orator, Fred Stebler, and Austin A. Gamble, of Riverside, California, the said Robert Strain did sell, assign, transfer and set over unto your said orator and the said

Austin A. Gamble, the full and exclusive right, title and interest in and to the said invention and in and to the letters [10] patent to be granted and issued therefor, and did authorize and request the Commissioner of Patents to issue said letters patent jointly to your orator and the said Austin A. Gamble; that said instrument in writing was, to wit, prior to June 9th, 1903, duly and regularly recorded in the United States Patent Office; that thereafter such proceedings were duly and regularly had and taken in the matter of such application; that, to wit, on June 9th, 1903, letters patent of the United States of America, No. 730,412, were duly and regularly granted and issued and delivered by the Government of the United States of America to your orator and the said Austin A. Gamble, whereby there was granted and secured to your orator and the said Austin A. Gamble, their heirs, legal representatives and assigns, for the full term of seventeen years (17), from and after said 9th day of June, 1903, the sole and exclusive right, liberty and privilege of making, using and vending to others to be used the said invention through the United States of America and the territories thereof; that the said letters patent were duly issued in due form of law under the seal of the United States Patent Office and duly signed by the Commissioner of Patents, all as will more fully appear from said original letters patent or a duly certified copy thereof which are ready in Court to be produced by your orator, as may be required; and that prior to the grant, issuance and deliverance of the said letters patent all proceedings were had

and taken which were required by law to be had and taken prior to the issuance of letters patent for new and useful inventions. [11]

III.

And your orator further shows unto your Honors that on October 12th, 1903, the said Robert Strain and your orator and the said Austin A. Gamble discovered for the first time that the said letters patent were inoperative and insufficient and that the errors which rendered said letters patent No. 730,412 so inoperative and insufficient arose from the inadvertence, accident and mistake of the Commissioner of Patents of the United States and without any fraudulent intention on the part of the said Robert Strain, or upon the part of your orator, or upon the part of said Austin A. Gamble; that said inadvertence, accident and mistake upon the part of the said Commissioner of Patents of the United States consisted in this, that after the said Robert Strain had duly filed in the United States Patent Office his application for letters patent upon the said Fruit Grader, as aforesaid, one Charles Rayburn, did on August 18th, 1902, file in the United States Patent Office an application for letters patent upon said new and useful Fruit Grader, and in said application did make certain claims as the original, true and first inventor thereof; that through the inadvertence, accident and mistake of the Commissioner of Patents a patent was issued to the said Charles Rayburn therefor, said letters patent being numbered 726,756, and were granted, issued and delivered to the said Charles Rayburn on April 28th, 1903, and while the

said Robert Strain's application for letters patent was pending in the United States Patent Office, as aforesaid, and the Commissioner of Patents did by inadvertence, accident and mistake fail and neglect to give notice to the said Robert Strain, or your orator, or said Austin A. Gamble, of said Charles Rayburn's application for letters patent upon said Fruit Grader, and did fail and [12] neglect to declare an interference proceeding between said Robert Strain and Charles Rayburn or the applications of said Robert Strain and Charles Rayburn for letters patent upon said Fruit Grader, and did fail and neglect to determine whether the said Robert Strain or the said Charles Rayburn was the original, first and sole inventor of said Fruit Grader, and did fail and neglect to determine the question of priority of invention between said Robert Strain and said Charles Rayburn; that said Robert Strain and your orator and the said Austin A. Gamble first discovered this inadvertence, accident and mistake upon the part of the Commissioner of Patents on October 12th, 1903, and did forthwith and immediately direct their attorneys to prepare an application for a re-issue patent upon said Robert Strain's said invention in Fruit Grader; that said Robert Strain did make due application in writing, in due form of law, for a reissue of said letters patent, which said application was filed in the United States Patent Office on October 21st, 1903, by the said Robert Strain with the full consent and allowance of your orator and the said Austin A. Gamble, and that thereafter due proceedings were had in the United States Patent Office

in accordance with the Statutes in such cases made and provided, and in accordance with the rules of the United States Patent Office, and that said Robert Strain was adjudged to be the original, first and sole inventor of said Fruit Grader and judgment of priority of invention was rendered and entered in the United States Patent Office in favor of Robert Strain and against said Charles Rayburn; and thereafter, to wit, on December 27th, 1904, the said Robert Strain and your orator and the said Austin A. Gamble having in all respects complied with the Acts of Congress in such case made and provided, and having surrendered [13] the said original letters patent No. 730,412, said letters patent were cancelled and new or amended letters patent which were marked "Reissue No. 12,297" were on the 27th day of December, 1904, in due form of law, granted, issued, and delivered to your orator and the said Austin A. Gamble, which said reissue letters patent are of record in the Patent Office of the United States, as will more fully and at large appear from said original reissued letters patent or a duly certified copy thereof ready here in court to be produced, whereby there was granted and secured to your orator and the said Austin A. Gamble, their heirs, legal representatives and assigns, for the full term of seventeen years (17), from and after the 9th day of June, 1903, the sole and exclusive right, liberty and privilege of making, using and vending the said invention as described and claimed in said reissued letters patent throughout the United States of America and the territories thereof.

IV.

And your orator further shows unto your Honors that the said invention so set forth, described and claimed in and by the said letters patent aforesaid is of great value, and has been extensively practiced by your orator and by your orator and the said Austin A. Gamble, and that since the grant, issuance and delivery of the said letters patent the said Fruit Grader has gone into great and extensive use and your orator and said Austin A. Gamble have sold large numbers thereof and the same has substantially displaced all other forms of devices for said purpose and become the standard Fruit Grader; and upon each and every one of said Fruit Graders manufactured, used or sold by your orator [14] or by your orator and said Austin A. Gamble, as aforesaid, your orator, and your orator and the said Austin A. Gamble have marked in bold and conspicuous letters the word "Patented" together with the day and date of issuance of said letters patent, to wit, June 9th, 1903, and December 27th, 1904, thereby notifying the public of said letters patent, and the trade and public have generally respected and acquiesced in the validity and scope of said letters patent and of the exclusive rights of your orator, and of your orator and said Austin A. Gamble therein and thereunder, and save and except for the infringement thereof by defendants as hereinafter set forth, your orator, and your orator's assignors, have had and enjoyed the exclusive right, liberty and privilege, since December 27th, 1904, of manufacturing, selling and using Fruit Graders embodying and

containing the invention described in, set forth and claimed in said letters patent, and but for the wrongful and infringing acts of defendants, as hereinafter set forth, your orator would now continue to enjoy the said exclusive rights and the same would be of great and incalculable benefit and advantage to your orator, and the said defendants have been, long prior to the commencement of this suit, notified in writing of the grant, issuance and delivery of the said letters patent and of the rights of your orator thereunder, and have had full knowledge of your orator's said rights under said letters patent, and demand has been made upon defendants to respect the said letters patent and not to infringe thereon, but notwithstanding such notice the defendants have continued to make, use and sell Fruit Graders embodying the said invention, as hereinafter more particularly set forth. [15]

V.

Your orator further shows unto your Honors that heretofore, to wit, prior to the first day of January, 1910, by an instrument in writing in due form of law, duly signed by the said Austin A. Gamble, and delivered by him to your orator, the said Austin A. Gamble did sell, assign, transfer and set over unto your orator, his heirs and assigns, all his right, title and interest in and to the said Fruit Grader invention and in and to the said letters patent aforesaid granted and issued therefor, and did thereby sell, assign, transfer and set over unto your orator, and vest in your orator, and your orator did become the sole and exclusive owner of the full and exclusive

right, title and interest in and to the said Fruit Grader invention and in and to the said letters patent granted and issued therefor, all as will more fully and at large appear from said original instrument in writing or a duly certified copy thereof ready in court to be produced as may be required.

VI.

And your orator further shows unto your Honors that notwithstanding the premises, but well knowing the same, and without the license or consent of your orator, and in violation of said letters patent, and of your orator's rights thereunder, the said defendants herein have within the year last past and in the Southern District of California, to wit, in the county of Riverside, State of California, and elsewhere, made, used and sold to others to be used, and are now making, using and selling to others to be used Fruit Graders embodying, containing and embracing the invention described [16] and claimed and patented in and by said reissued letters patent, and have infringed upon the exclusive rights secured to your orator by virtue of said reissued letters patent, and that the Fruit Graders so made, used and sold by defendants were and are infringements upon said letters patent and each of said Fruit Graders contains in it the said patented invention, and that although requested so to do, defendants refuse to cease and desist from the infringement aforesaid and are now making, using and selling Fruit Graders containing and embracing the said patented invention, and threaten and intend to continue so to do, and will continue so to do unless restrained by this

Court, and are realizing, as your orator is informed and believes, large gains, profits and advantages, the exact amount of which is unknown to your orator; that by reason of the premises and the unlawful acts of the defendants aforesaid, your orator has suffered and is suffering great and irreparable damage and injury; that for the wrongs and injuries herein complained of your orator has no plain, speedy or adequate remedy at law and is without remedy save in a court of equity, where matters of this kind are properly cognizable and relievable.

To the end, therefore, that the said defendants, Riverside Heights Orange Growers' Association, George D. Parker and Parker Machine Works, may, if they can, show why your orator should not have the relief herein prayed, and may according to the best and utmost of their knowledge, recollection, information and belief, but not under oath, (an answer under oath being hereby expressly waived), full, true, direct and perfect answer make to all and singular the matters and things hereinbefore charged; your orator prays that the defendants may be enjoined and restrained, both provisionally [17] and perpetually, from further infringement upon the said letters patent, and be decreed to account for and pay over unto your orator the gains and profits realized by defendants from and by reason of the infringement aforesaid, and may be decreed to account for and pay over unto your orator the damages suffered by your orator by reason of the said infringement, together with the costs of this suit, and for such other and further or different

relief as equity and good conscience shall require.

May it please your Honors to grant unto your orator a writ of injunction issued out of and under the seal of this Court, provisionally, and until the final hearing, enjoining and restraining said defendants, Riverside Heights Orange Growers' Association, George D. Parker and Parker Machine Works, their agents, attorneys, associates, servants and employees, and each and every thereof, from making, using and selling any Fruit Graders containing or embracing the invention patented in and by said letters patent, and that upon the final hearing of this case said provisional injunction may be made final and perpetual.

May it please your Honors to grant unto your orator a writ of subpoena of the United States issued out of and under the seal of this Court and directed to the said defendants, Riverside Heights Orange Growers' Association, George D. Parker, and Parker Machine Works, commanding them by a day certain and under a certain penalty fixed by law, to be and appear before this Honorable Court, then and there to answer this Bill of Complaint and to stand to and perform and [18] abide by such further orders and decrees as to your Honors may seem meet in the premises.

And your orator will ever pray.

FRED STEBLER.

FREDERICK S. LYON,

Solicitor and of Counsel for Complainant,
503-8 Merchants' Trust Company
Building, Los Angeles, California.

[19]

United States of America,
 State of California,
 County of Riverside,—ss.

FRED STEBLER, being duly sworn, on oath says: That he is the complainant named in the foregoing Bill of Complaint, that he has read said Bill of Complaint and knows the contents thereof, and that the same is true of his own knowledge.

FRED STEBLER.

Subscribed and sworn to before me this 23d day of May, 1910.

[Seal]

WM. STUDABECKER,
 Notary Public in and for Riverside County, State
 of California.

(Endorsed.) [20]

* * * * *

[Title of Court and Cause.]

Answer.

The answer of the Riverside Heights Orange Growers' Association, George D. Parker and Parker Machine Works, defendants, to the Bill of Complaint of Fred Stebler, complainant.

These defendants, now and at all times hereafter, saving and reserving unto themselves all benefit and advantage of exception which can or may be had or taken to the many errors, uncertainties, and other imperfections in said complainant's said bill of complaint contained, for answer thereto, or unto so much and such parts thereof as these defendants are

advised is, or are, material or necessary for them to make answer unto, these defendants for answering saith:

1. Admit that the Riverside Heights Orange Growers' Association, [23] one of the defendants herein, is a corporation organized and existing under and by virtue of the laws of the State of California, and having its principal place of business in Riverside, California, and admits that George D. Parker, another of the defendants herein, is a resident of Riverside, California.

2. Deny that the Parker Machine Works, one of the defendants herein, is a corporation organized and existing under and by virtue of the laws of the State of California, and having its principal place of business in Riverside, California.

3. They deny that the said Robert Strain, mentioned in the Bill of Complaint, prior to the 28th day of April, 1902, or at any other time, or at all, was either the original first and sole inventor of the alleged certain new and useful FRUIT GRADER, alleged in the Bill of Complaint to be more particularly described in the alleged letters patent alleged to have been issued therefor by the Government of the United States; and they deny that the said improvements, or any of them, were a new or useful invention, or were not known or used by others in this country before the alleged invention or discovery thereof by the said Robert Strain, and deny that the same were not patented or described in any prior publication in the United States of America or any foreign country before his invention or discovery

thereof, or more than two years prior to his application for letters patent thereon in the United States of America, or that the same was not in public use or on sale in the United States for more than two years prior to his said application for letters patent of the United States therefor, or that the same was not abandoned. [24]

4. These defendants, further answering, say that as to whether or not the said Robert Strain, being as aforesaid the alleged original and first inventor of the said alleged improvement in FRUIT GRADERS, or otherwise, did on the 28th day of April, 1902, or at any other time, duly or regularly make or file in the Patent Office of the United States, an application in writing, praying for the issuance to him of letters patent of the United States for the said alleged invention, these defendants are not informed save by the Bill of Complaint herein, and they, therefore, deny the same, all and singular, and leave complainant to make such proof thereof as he may be advised is material.

5. These defendants, further answering, say that as to whether or not after the filing of the said alleged application in the United States Patent Office, and before the granting of letters patent thereon, or at any other time, the said Robert Strain, by an instrument in writing, in due form of law, or otherwise, duly signed by him, and by him delivered to Fred Stebler, complainant herein, and Austin A. Gamble, of Riverside, California, and duly recorded in the United States Patent Office, or otherwise, the said Robert Strain did sell, assign, transfer and set

over unto the said Fred Stebler and the said Austin A. Gamble, the full and exclusive right, title and interest in and to the said invention, or any right, title or interest in and to the same, and in and to the letters patent to be granted and issued therefor, with the request that the letters patent therefor, when granted, should be issued jointly to the said Fred Stebler and the said Austin A. Gamble, they are not informed save by the Bill of Complaint herein, and they, therefore, deny the same, all and singular, and leave complainant to make such proof thereof as he shall be [25] advised is material. These defendants deny that thereafter, or at any time, such proceedings were duly and regularly, taken in the matter of the said alleged application, that on the 9th day of June, 1903, or at any other time, letters patent of the United States of America, No. 730,412, were duly and regularly granted and issued and delivered by the Government of the United States of America to the said Fred Stebler and the said Austin A. Gamble, or either of them, and deny that the said Fred Stebler and the said Austin A. Gamble, or either of them, or their heirs, legal representatives and assigns, or either of them, were granted for the full term of seventeen years (17) from and after the 9th day of June, 1903, or for any other term, the sole and exclusive right, liberty and privilege of making, using and vending to others to be used the said alleged invention throughout the United States of America and the territories thereof.

6. These defendants, further answering, deny that the said alleged letters patent were issued in

due form of law, or otherwise, under the seal of the United States Patent Office, or otherwise, or were duly signed by the Commissioner of Patents; and deny that said facts will more fully appear from said alleged letters patent themselves.

7. These defendants, further answering, deny that prior to the issuance of said alleged letters patent, all proceedings were had or taken which were required to be had and taken prior to the issuance of letters patent for new and useful inventions.

8. These defendants, further answering, say that whether [26] the said alleged letters patent No. 730,412, referred to in the Bill of Complaint as having been issued as therein stated, for an Improved FRUIT GRADER, were inoperative and insufficient, and whether the error by reason of which the same were rendered inoperative and insufficient arose by inadvertence, accident, and mistake on the part of the Commissioner of Patents of the United States and without any fraudulent intention on the part of the said Robert Strain, or upon the part of Fred Stebler, complainant herein, or upon the part of the said Austin A. Gamble, they are not informed save by the Bill of Complaint herein, and they, therefore, deny the same, and leave complainant to make such proof thereof as he shall be advised is material.

9. These defendants, further answering, say that whether the alleged inadvertence, accident and mistake upon the part of the Commissioner of Patents of the United States was occasioned by the fact that after the said Robert Strain had filed in the United States Patent Office his alleged application for let-

ters patent upon said FRUIT GRADER, one Charles Rayburn, did on August 18th, 1902, file in the United States Patent Office an application for letters patent upon said new and useful FRUIT GRADER, and in said application did make certain claims as the original, true and first inventor thereof, and that through the inadvertence, accident and mistake of the Commissioner of Patents a patent was issued to said Charles Rayburn therefor, said letters patent being numbered 726,756, which were granted, issued and delivered to the said Charles Rayburn on April 28th, 1903, and while the said Robert Strain's application for letters patent was pending in the United States Patent Office, and the Commissioner of Patents did by inadvertence, accident and mistake fail and neglect to give notice to the said Robert Strain, or to Fred Stebler, complainant herein, or to said Austin A. Gamble, of said Charles Rayburn's application for letters patent upon [27] said FRUIT GRADER, and did fail and neglect to declare an interference proceeding between said Robert Strain and Charles Rayburn or the applications of said Robert Strain and Charles Rayburn for letters patent upon said FRUIT GRADER, and did fail and neglect to determine whether the said Robert Strain or the said Charles Rayburn was the original, first and sole inventor of said FRUIT GRADER, and did fail and neglect to determine the question of priority of invention between said Robert Strain and Charles Rayburn, they are not informed save by the Bill of Complaint herein, and they, therefore,

deny the same, all and singular, and leave complainant to make such proof thereof as he shall be advised is material.

10. These defendants further answering say that whether the said Robert Strain, and Fred Stebler, complainant herein, and the said Austin A. Gamble first discovered the alleged inadvertence, accident and mistake upon the part of the Commissioner of Patents on October 12th, 1903, and did forthwith and immediately direct their attorneys to prepare an application for a reissue patent upon said Robert Strain's said invention in FRUIT GRADERS, or whether the said Robert Strain did make due application in writing, in due form of law, or otherwise, for a reissue of the letters patent mentioned in the bill of complaint, or whether said alleged application was filed in the United States Patent Office on October 21st, 1902, by the said Robert Strain with the full consent and allowance of Fred Stebler, complainant herein, and the said Austin A. Gamble, or whether thereafter due proceedings were had in the United States Patent Office in accordance with the Statute in such cases made and provided, and in accordance with the Rules of the United States Patent Office, or whether the said Robert Strain was adjudged to be the original, first and sole inventor of said FRUIT GRADER and judgment or priority of invention [28] was rendered and entered in the United States Patent Office in favor of said Robert Strain and against said Austin A. Gamble, they are not informed save by the Bill of Complaint herein, and they, therefore, deny the same, all and singular,

and leave complainant to make such proof thereof as he shall be advised is material.

11. These defendants further answering say that whether the said Robert Strain and Fred Stebler, complainant herein, and Austin A. Gamble having in all respects complied with the Acts of Congress in such cases made and provided, and having surrendered the said original letters patent No. 730,412, said letters patent were cancelled and new or amended letters patent, which were marked "Re-issue No. 12,297," were on the 27th day of December, 1904, in due form of law, granted, issued and delivered to Fred Stebler, complainant herein, and the said Austin A. Gamble, which said reissue letters patent are of record in the Patent Office of the United States, they are not informed save by the Bill of Complaint herein, and they, therefore, deny the same, all and singular, and leave complainant to make such proof thereof as he shall be advised is material; and deny that said facts will more fully and at large appear from said original reissue letters patent or a duly certified copy thereof.

12. These defendants deny that the said reissue letters patent No. 12,297 were effective to grant and secure to the said Fred Stebler, complainant herein, and the said Austin A. Gamble, their heirs, legal representatives and assigns, for the full term of seventeen years (17) or for any term, either from and after the 9th day of June, 1903, or from any other date, the sole and exclusive right, liberty and privilege of [29] making, using and vending the said invention as described and claimed in said re-

issue letters patent throughout the United States of America and the territories thereof.

13. These defendants aver that they are not informed as to whether or not the invention alleged to be contained in the said reissue letters patent No. 12,297 is the same invention as that set forth in the original letters patent No. 730,412, set forth in the Bill of Complaint herein, and they, therefore, deny the same and leave the complainant to make such proof thereof as he shall be advised is material.

14. Further answering, these defendants deny that the alleged invention alleged to be protected by the said alleged reissue letters patent is of great or any value, and deny that since the issuance of the said alleged reissue letters patent, or at any time; the Fruit Graders mentioned therein have gone into great and extensive use, or have been extensively practiced, or otherwise, and deny that large numbers thereof have been sold, and deny that upon each and every one of said Fruit Graders manufactured, used or sold by the complainant herein, or by the said complainant and Austin A. Gamble, or by either of them, made in accordance with the said reissue letters patent, has been marked with the word "Patented" together with the date and number thereof, and deny that the public was thereby notified of the same, and deny that the trade and public have generally respected and acquiesced in the validity and scope of said letters patent and the exclusive right, or any right of the complainant herein, and of the complainant and said Austin A. Gamble, and deny that save and except for the alleged infringement thereof by

these defendants, the complainant herein and the complainant and the said Austin A. Gamble, would have had [30] and enjoyed the exclusive right, liberty and privilege, since December 27th, 1904, or any other time, of manufacturing, selling and using Fruit Graders embodying and containing the invention described in, set forth and claimed in said letters patent, and deny that but for the alleged wrongful and infringing acts of these defendants, complainant herein would not continue to enjoy the said exclusive rights, or any rights, at all and that the same would be of great and incalculable benefit and advantage, or any benefit and advantage, to the complainant, and deny that they have been, long prior to the commencement of this suit, notified in writing of the grant, issuance and delivery of the said letters patent and of the rights of the complainant thereunder, and deny that they have had full knowledge of complainant's said rights under said letters patent, and that demand has been made upon them to respect the said letters patent and not to infringe thereon, and deny that notwithstanding such alleged notice they have continued to make, use, and sell Fruit Graders embodying the said alleged invention.

15. Defendants further answering say that whether prior to the first day of January, 1910, or at any other time, by an instrument in writing in due form of law, or otherwise, duly signed by the said Austin A. Gamble, and delivered by him to the complainant herein, the said Austin A. Gamble did sell, assign, and transfer and set over unto the complainant herein, his heirs, and assigns, all his right,

title and interest in and to the said Fruit Grader invention and in and to the said letters patent granted and issued therefor, and did thereby sell, assign and transfer and set over unto and did vest in the complainant herein, and complainant did become the sole and exclusive owner of the full and exclusive right, title and interest in and to the said alleged Fruit Grader invention and [31] in and to the said alleged letters patent granted and issued therefor, they are not informed save by said Bill of Complaint herein, and they, therefore, deny the same, all and singular, and leave complainant to make such proof thereof as he may be advised is material, and they deny that said facts will more fully appear from said original instrument in writing or a duly certified copy thereof.

16. These defendants deny that since the issuance of said alleged letters patent, and within the year last past, or at any time, or within the Southern District of California, or at any other place, the defendants herein have made, used and sold to others to be used, and are now making, using and selling to others to be used Fruit Graders embodying, containing, and embracing the invention described and claimed and patented in and by said reissue letters patent, and deny that they have infringed or are now infringing, or threaten to continue to infringe upon the alleged exclusive right alleged to be secured to complainant by virtue of said alleged letters patent, and deny that any Fruit Grader made, used or sold, or sold to others for use, at any time, were or are an infringement upon said alleged letters patent,

or contain or embody the said alleged invention.

17. Further answering, defendants deny that complainant has requested these defendants to cease or desist from their alleged infringement aforesaid, and deny that they are now making or selling or using Fruit Graders containing or embracing the alleged invention or any of them, alleged to be patented in and by said alleged letters patent, and deny that unless restrained by the order of this Honorable Court they will at any time make or sell or use Fruit Graders alleged to be described [32] and claimed in said alleged letters patent.

18. These defendants deny that by reason of the premises set up in said Bill of Complaint, or by reason of any unlawful act of the defendants, complainant has suffered any injury or damage, and deny that they have realized large gains, profits and advantages from and by reason of any alleged infringement of complainant's rights.

19. These defendants, further answering, aver that said alleged improvements or invention described and claimed in the said original letters patent mentioned in the Bill of Complaint, and mentioned in the reissue letters patent thereof, did not and do not constitute any invention or discovery that was or is patentable under the laws of the United States.

20. Defendants, further answering, aver that in view of the prior state of the art pertaining to Fruit Graders and the manner of their construction and operation, there was and is no patentable invention contained and embraced in the said alleged improve-

ments described and claimed in the said alleged re-issue letters patent sued on herein; but that the same or substantially the same things were well known in the art prior to the alleged invention thereof by the said Robert Strain; and, if in the alleged improvements there is anything new or different from what was known or discovered in said prior art, it was not the result of patentable invention, but wholly the result of the ordinary skill of the mechanic, and is of no practical utility.

And for a further and separate defence, these defendants aver that the alleged invention described and claimed in the said [33] alleged reissue letters sued on herein, or substantially the same was, long prior to the supposed invention or discovery thereof by the said Robert Strain, indicated, described and patented in and by the following letters patent of the United States, to wit:

Number.	Date.	Names of Patentees.
No. 247,428,	Sept. 20, 1881,	H. B. Stevens.
“ 348,128,	Aug. 24, 1886,	J. W. Keeney.
“ 352,421,	Nov. 9, 1886,	J. S. McKenzie.
“ 399,509,	Mar. 12, 1889,	F. N. Ellithorpe.
“ 430,031,	June 10, 1890,	J. A. Jones.
“ 442,288,	Dec. 9, 1890,	J. A. Jones.
“ 456,092,	July 14, 1891.	H. H. Hutchins.
“ 458,422,	Aug. 25, 1891,	J. T. Ish.
“ 465,856,	Dec. 29, 1891,	H. H. Hutchins.
“ 466,817,	Jan. 12, 1892,	E. E. Woodward.
“ 475,497,	May 24, 1892.	G. A. & C. F. Fleming.
“ 482,294,	Sept. 6, 1892,	A. C. Burke.
“ 529,032,	Nov. 13, 1894,	H. C. Jones.

Number.	Date.	Names of Patentees.
No. 534,783,	Feb. 26, 1895,	A. Cerruti.
“ 538,330,	Apr. 30, 1895,	A. D. Huntley.
“ 654,281,	July 24, 1900,	M. P. Richards.
“ 671,646,	Apr. 9, 1901,	R. G. Bailey.
“ 673,127,	Apr. 30, 1901,	E. N. Maull.
“ 713,484,	Nov. 11, 1902,	C. D. Nelson.
“ 726,756,	Apr. 28, 1903,	C. Rayburn.

[34]

21. Further answering, defendants aver that said Robert Strain was not the original or first or any inventor or discoverer of the alleged improvements and inventions, or any of them, alleged to be described in said alleged letters patent in suit, or of any material or substantial part of the same, but that, on the contrary, prior to the alleged invention thereof by the said Robert Strain, Charles Rayburn, who resides at Visalia, in the county of Tulare, State of California, had conceived and invented each and all of said alleged improvements and inventions, and said Charles Rayburn is the original and first inventor and discoverer of said alleged improvements and inventions, and of each and all of them.

22. And for a further and separate defence, these defendants aver that the said Robert Strain was not the original and first inventor or discoverer of the improvements or inventions alleged to be described and covered by the said alleged reissue letters patent, nor of any material or substantial parts thereof, but that the same or all material or substantial parts thereof were, prior to the alleged invention thereof by the said Robert Strain, and more than two years prior to his said alleged application for letters pat-

ent thereon, manufactured and sold in this country, and these defendants specify such manufacture and sale as follows, to wit: Manufactured and sold by G. G. Wickson, of the City and County of San Francisco, State of California.

23. And for a further and separate defence, these defendants aver that the said alleged improvements and inventions, and each and all of them, had been, prior to the alleged invention [35] thereof by the said Robert Strain, and more than two years prior to his alleged application for letters patent thereon, known to and used by the following named persons, firms, and corporations, at the following places, to wit:

Uplands Citrus Association, in its plant at Upland, California; also by the W. H. Jameson Packing-house, in its plant at Corona, California; The Arlington Heights Fruit Company, in its plant at Arlington, California; Victoria Avenue Citrus Association, in its plant at Casa Blanca, California; San Jacinto Packing-house Company in its plant at Arlington, California; Pacentia Orange Growers' Association, in its plant at Fullerton, California; Santiago Orange Growers' Association, in its plant at Orange, California; Indian Hill Citrus Association, in its plant at North Pomona, California; Worthley & Strong, in their plant at Riverside, California; and was known to Charles S. Adams, whose residence is Upland, California; W. H. Jameson, whose residence is Corona, California; Charles Spencer, Edward Gilman, and Ernest Parker, each of Orange, California, and was known to and used by

others whose names and places of residences, and the places of such use are at this time unknown to these defendants, but which these defendants crave leave to insert herein and make a part hereof when they shall be discovered.

24. Further answering, these defendants aver that the public at no time has acquiesced in the validity of the said alleged letters patent in suit, and that the validity of said letters patent has not been adjudicated or established in an action at law; that, therefore, this Court sitting as a court in equity has no jurisdiction of this case, and complainant's relief in the premises, if to any relief he is entitled, can only be obtained in an action at law. [36]

And, therefore, these defendants submit and insist that under the facts and circumstances as above alleged, the said complainant is not entitled to the relief or any part thereof in the said bill of complaint demanded, nor has said complainant any right to any further answer to said bill, nor any part thereof, than is above given.

And these defendants pray the same advantage of their aforesaid answer as if they had pleaded or demurred to the said bill of complaint, and they pray

leave to be dismissed with their reasonable costs and charges in this behalf most wrongfully sustained.

RIVERSIDE HEIGHTS ORANGE GROWERS' ASSOCIATION.

PARKER MACHINE WORKS.

GEORGE D. PARKER.

By N. A. ACKER,

WM. F. BOOTH,

Solicitors and Attorneys for Defendants.

N. A. ACKER,

WM. F. BOOTH,

Solicitors and of Counsel for Defendants.

(Endorsed.) [37]

* * * * *

[Title of Court and Cause.]

[Enrollment.]

The complainant filed his Bill of Complaint in the United States Circuit Court for the Southern District of California, on the 24th day of May, 1910, which is hereto annexed;

A subpoena to appear and answer in said cause was thereupon, on said 24th day of May, 1910, issued, returnable on the 4th day of July, 1910, and is hereto annexed;

On the 27th day of June, 1910, all of the defendants appeared herein by N. A. Acker, Esq., and Will F. Booth, Esq., their solicitors;

On the 26th day of July, 1910, the answer of defendants to complainant's Bill of Complaint was filed herein, and is hereto annexed;

The replication of complainant to the answer of defendants was filed herein on the 31st day of August, 1910, and is hereto annexed;

Testimony was thereafter taken on behalf of the respective parties and filed in the clerk's office;

On the 11th day of September, 1912, being a day in the July Term, A. D. 1912, of the United States District Court for the Southern District of California—Present: The Honorable Olin Wellborn, District Judge, said cause came on to be heard before the Court on the pleadings and proofs, and the hearing having [39] been proceeded with on said day and on the following 12th, 13th, 16th and 17th days of September, 1912, and the Court having heard the pleadings and proofs and the arguments of counsel, and the cause having thereupon been submitted to the Court for its consideration and decision upon the pleadings and proofs and arguments, and the Court having duly considered the same and being fully advised in the premises, thereafter, on the 17th day of September, 1912, being a day in the July Term, A. D. 1912, of said District Court, ordered that a Decree be entered herein, dismissing complainant's bill of complaint, with costs, and accordingly, on the 30th day of September, 1912, a Final Decree was signed, filed, entered and recorded herein, and is hereto annexed: [40]

[Title of Court and Cause.]

Final Decree.

At a stated term, to wit, the July Term, A. D. 1912, of the above-entitled Court, held at the court-

room thereof in the city of Los Angeles, County of Los Angeles, State of California, on the 17th day of September, 1912—Present: Honorable OLIN WELLBORN, District Judge.

This cause having heretofore come on regularly to be heard upon the pleading and proofs, documentary and oral, taken and submitted in the case and being of record herein, the complainant being represented by Frederick S. Lyon, Esq., and the defendants by N. A. Acker, Esq., and the cause having been submitted to the Court, for its consideration and decision, and [41] the Court being fully advised in the premises, and it appearing to the Court that claims 1 and 10 of United States Reissue Letters Patent No. 12,297 (the only claims involved herein) granted Robert Strain, December 27, 1904, for an Improvement in FRUIT GRADERS, as construed by the Court are good and valid in law, and it further appearing to the Court that the defendants have not infringed the said claims—1 and 10 of the re-issue letters patent sued upon herein as construed by the Court:

It is ordered, adjudged and decreed that complainant's Bill of Complaint be, and the same is hereby, dismissed, and further that the defendants do have and recover from complainant the sum of \$383.40, being defendant's proper and necessary costs and disbursements herein.

OLIN WELLBORN,
District Judge.

Decree entered and recorded September 30th, 1912.

WM. M. VAN DYKE,
Clerk.

By Chas. N. Williams,
Deputy Clerk.

(Endorsed.) [42]

Whereupon, said bill of complaint, subpoena, answer, replication of complainant, and said Final Decree are hereto annexed; the said Final Decree being duly signed, filed and enrolled pursuant to the practice of said District Court.

Attest, etc.

[Seal]

WM. M. VAN DYKE,
Clerk.

By Chas. N. Williams,
Deputy Clerk.

(Endorsed.) [43]

* * * * *

[Title of Court and Cause.]

[Proofs Taken on Behalf of Complainant Before Notary Public Peck, Commencing February 2, 1912.]

PROOFS TAKEN ON BEHALF OF COMPLAINANT IN THE ABOVE-ENTITLED SUIT AT THE OFFICE OF FREDERICK S. LYON, 503-8 MERCHANTS TRUST COMPANY BUILDING, IN THE CITY OF LOS ANGELES, CALIFORNIA, COMMENCING AT THE HOUR OF 10 O'CLOCK A. M. OF FRIDAY, FEBRUARY 2, 1912, BEFORE

EARL CURTIS PECK, A NOTARY PUBLIC IN AND FOR THE COUNTY OF LOS ANGELES AND STATE OF CALIFORNIA, BY AGREEMENT WITHOUT NOTICE, NOTICE BEING WAIVED.

PRESENT: FREDERICK S. LYON, Esq., on Behalf of Complainant.

N. A. ACKER, Esq., on Behalf of Defendants. [46]

[Stipulation for Use of Uncertified Copies of Letters Patent; and Amendment of Answer.]

Whereupon the following proceedings were had:

It is stipulated that either party to the above-entitled suit may use in evidence uncertified printed copies of United States letters patent and that the same shall be given the same effect as though certified or original letters patent, subject to any objections as to competency under the pleadings or materiality.

It is stipulated and agreed that the answer of defendants may be considered as amended as follows:

That the device manufactured, sold and used by the defendants in the present action is made under and in accordance with the invention embodied in United States letters patent No. 997,468, granted George D. Parker under date of July 11th, 1911, for an improved fruit sizer or grader.

It is also stipulated that the answer may be considered as having contained therein in paragraph I on page 14, relative to the prior use and knowledge of fruit graders as follows:

That it was used by the Azusa Citrus Association

in the packing-house at Azusa, California, and also by the Pomona Fruit Growers' Exchange in its packing-house at Pomona California, and that the device was known to Thorndike C. Jameson, of Corona, Riverside County, California, Frederick K. Adams of Pomona, California, Owen Dao Burns of Azusa, California, Lawrence E. Tucker of Upland, California, and that the replication of complainant [47] stands as a replication to the answer as thus amended.

[Deposition of Fred Stebler, for Complainant.]

FRED STEBLER, a witness produced on behalf of complainant, being first duly sworn according to law, testified as follows, to wit:

Direct Examination.

(By Mr. LYON.)

Q. 1. You are the complainant in this suit?

A. Yes, sir.

Q. 2. In what business are you engaged, Mr. Stebler?

A. In the manufacture of packing-house machinery.

Q. 3. How long have you been engaged in the manufacture of packing-house machinery?

A. Over twelve years.

Q. 4. Where? A. At Riverside, California.

Q. 5. And what kinds of packing-house machinery have you manufactured during that time?

A. A full line of orange packing-house machinery.

Q. 6. Including what kinds of devices?

A. Including practically everything used therein.

Q. 7. You are the Fred Stebler mentioned as one of the grantees in Re-issue Letters Patent Number

(Deposition of Fred Stebler.)

12,297, dated December 27, 1904? A. Yes, sir.

Mr. LYON.—Complainant offers in evidence copy of Reissue Letters Patent Number 12,297, granted to Fred Stebler and Austin A. Gamble, of Riverside, California, on December [48] 27th, 1904, for the invention of Robert Strain on fruit grader and ask that the same be marked “Complainant’s Exhibit Patent in Suit.”

Q. 8. You reside at Riverside, California?

A. Yes, sir.

Q. 9. How long have you resided there?

A. Almost thirteen years.

Q. 10. Are you acquainted with Austin A. Gamble, of Riverside, California? A. Yes, sir.

Q. 11. How long have you known him?

A. Ten years.

Q. 12. Were you at any time in business with Austin A. Gamble? A. I was.

Q. 13. In what business?

A. The manufacture of packing-house machinery.

Q. 14. Where? A. At Riverside, California.

Q. 15. You were partners in that business, I believe? A. Equal partners.

Q. 16. Up to what time?

A. Up to July 9th, 1909.

Q. 17. I show you an instrument and ask you if you have ever seen it before. A. I have.

Q. 18. When did you first see it?

A. When it was executed, on the date which it bears.

Q. 19. Were you present during its execution?

(Deposition of Fred Stebler.)

[49] A. Yes, sir.

Q. 20. And after its execution, was it delivered to you? A. Yes, sir.

Q. 21. You say you were present when this instrument was executed. By whom was it executed?

A. By Mr. Austin A. Gamble himself.

Q. 22. And by him delivered to you?

A. Yes, sir.

Q. 23. The Austin A. Gamble to whom you have referred is the Austin A. Gamble referred to in the Complainant's Exhibit Patent in Suit?

A. Yes, sir.

Mr. LYON.—We offer the instrument last referred to by the witness in evidence and ask that the same be marked "Complainant's Exhibit Assignment Gamble to Stebler."

Mr. ACKER.—The introduction of the instrument is objected to as proof of title in the complainant to the present action.

Q. 24. You state that for the past twelve years or so you have been engaged in the manufacture of fruit-packing machinery including orange graders or sizers. Have you or has the firm of Stebler and Gamble, to which you have referred, ever manufactured any machines embodying the construction of machine set forth and described and claimed in the patent, Complainant's Exhibit Patent in Suit?

A. Yes, sir.

Q. 25. To what extent?

A. Well, we have been making these machines almost exclusively for the past nine or ten years.

[50]

(Deposition of Fred Stebler.)

Q. 26. Can you state the circumstances under which the firm of Stebler and Gamble commenced the manufacture of such machines?

A. Well, prior to the advent of this particular machine we had been making machines of other styles, none of which were altogether satisfactory and when this machine came out and we recognized its advantages and were offered an opportunity of getting hold of it, we took it.

Q. 27. What occasion or opportunity, Mr. Stebler, have you had to familiarize yourself with the construction, mode of operation and number of orange sizing machines used in California.

A. Well, since the time I have been engaged in this business I have studied the merits and possibilities of all of these machines.

Mr. ACKER.—Counsel for defendants objects to the presence of Mr. Knight in the room during the course of the examination of the witness Stebler, due to the fact that he understands he is to be a witness in this case and asks that he be excluded from the room.

Mr. LYON.—Inasmuch as Mr. Knight will be called as an expert witness and not a fact witness and his testimony will be largely based upon facts testified to by this witness, it will be necessary for him either to hear the testimony of the witness or have the deposition of this witness read to him and counsel for defendant may take his choice as to the procedure.

Mr. ACKER.—The objection is still urged as to

(Deposition of Fred Stebler.)

the presence [51] of Mr. Knight in the room during the examination of Mr. Stebler. Please make a note on the record that the attorney for complainant refuses to dismiss or exclude him from the room during the examination of the witness.

Mr. LYON.—The refusal is based on the reasons stated and on the ground that there is no reason for the exclusion of Mr. Knight from the room, and on the further ground that counsel for defendants has refused to indicate that he will remain in attendance while the deposition of this witness is written up in order that it may be before Mr. Knight as an expert in giving of his deposition.

A. (Con.) And from the first have been frequently called in consultation with various of the leading orange packers with a view to improving the machines and methods then in use by them.

Q. 28. And to what extent since the introduction of the machine of Complainant's Exhibit Patent in Suit have you been in and throughout the packing-houses of California?

A. I have been passing to and fro between all of them either in consultation in my capacity as expert or actually furnishing them these improved machines.

Q. 29. Are you then sufficiently familiar with the orange-grading and sizing machines which have been in use in California since 1902 to enable you to state what kinds of machines have been in general use?

A. Yes, sir.

Q. 30. To what extent, then, since the introduction of the machine of Complainant's Exhibit Patent

(Deposition of Fred Stebler.)

in Suit has the machine of said patent gone into use?

[52]

A. To the practical exclusion of all others.

Q. 31. When you say "to the practical exclusion of all others," what has been your own business experience in the placing of machines of this patent?

A. We have placed them in almost every packing-house, not only in California, but elsewhere.

Q. 32. What became of the machines which had been in such packing-houses?

A. If they had machines prior to that time they were discarded or thrown away almost invariably.

Q. 33. Have you yourself removed any of such old machines? A. A great many of them.

Q. 34. What machine has become the standard machine in use in orange packing-houses for sizing or grading oranges?

Mr. ACKER.—Objected to as incompetent, irrelevant and immaterial and on the further ground as calling for the mere expression of opinion on the part of this witness and intended to have the witness express his view as to the use of his own device.

A. Machines of the type shown in Complainant's Exhibit Patent in Suit, having a separately and independently adjustable sizing member for each size or grade of fruit packed.

Q. 35. Prior to the time that your firm of Stebler and Gamble acquired the Robert Strain invention, set forth in Complainant's Exhibit Patent in Suit, what kind of fruit graders had your firm been manufacturing?

(Deposition of Fred Stebler.)

A. Prior to the acquiring of the Robert Strain invention we had been manufacturing and placing a great many so-called "rope sizers" and also the Ish or California sizer, in [53] which latter the grading was accomplished by running the fruit over a grade-way composed of a traveling belt and a stepped or graduated rotating roller.

Q. 36. How was this stepped or graduated roller formed?

A. It was a cylindrical roll mounted in journals and having graduated reduced diameters, each reduction in diameter conforming to some particular size of fruit as it issued from the machine.

Q. 37. With such a construction these rolls were in a single piece, were they?

A. Practically a single or continuous one-piece roller the entire length of the machine.

Mr. ACKER.—The answer is objected to as not responsive to the question.

Q. 38. What was the rope sizer that you referred to?

A. The rope sizer was a machine in which the grade-ways were composed of two traveling ropes, that is, each grade-way was composed of two traveling ropes which travelled in a divergent path, so that the fruit carried along on them would finally come to a space wide enough between them to drop through and in this manner the sizing was accomplished.

Q. 39. In such rope grader, was it possible to make individual adjustment of the different grades?

A. No, it was not possible.

(Deposition of Fred Stebler.)

Q. 40. With the California or Ish grader to which you have referred, how was the adjustment of the different grades or sizes accomplished, if at all?

A. Well, after the machine was turned out from the factory [54] it had the same fault as the rope sizer in that respect, in that you could not adjust one size without affecting the sizes adjacent to it. We could, of course, regulate these sizes in making these rolls by regulating each and every different diameter, but it was necessary to predetermine these sizes in making these rolls to the extent that they would afterwards have to remain in the machine so that in that machine there was no opportunity of an individual or independent adjustment.

Q. 41. Was there any demand for such an independent adjustment?

A. There was, indeed, as is shown by the sales of the new machine we were able to make after we began building it.

Q. 42. The new machine you referred to was what machine? A. The Robert Strain invention.

Q. 43. You mean the one of the patent here in suit? A. Yes, sir.

Q. 44. And what was the occasion of your acquiring that patent?

A. Well, at that time we were the owners of the Ish Patent of which this Robert Strain invention was obviously an infringement, and when we went to Mr. Strain and explained the situation to him and to Mr. E. K. Benchley, who was interested in it with him, they at once proposed that we take the matter

(Deposition of Fred Stebler.)

off their hands by paying them a stipulated sum, which we readily agreed to.

Q. 45. I did not intend, Mr. Stebler, to enquire so much as to the details of the acquisition of the Robert Strain invention, as I did as to whether there was any occasion [55] so far as the market demand was concerned?

A. We, of course, saw that there was a demand and need for the machine, otherwise, we should not have taken up his proposition.

Q. 46. About how many of the graders or sizers embodying this Robert Strain invention of the patent in suit has the firm of Stebler and Gamble, or since your succession, you yourself, made and sold?

A. I can't answer that question definitely, off-hand. I could, however, refer to our books and records and probably get the exact number.

Q. 47. Can you approximate it?

A. Yes, our sales of that machine for the past six years have probably averaged forty machines a year.

Q. 48. And to what extent have you put in graders or sizers of any other construction or mode of operation?

A. We have practically put in no others, since we began building these machines.

Q. 49. And based upon your observations on your various trips through the packing-houses, what would you say in regard to the number of machines of other constructions which have been installed and used which did not involve the independent, individual adjustment of the grades as set forth in the

(Deposition of Fred Stebler.)

patent in suit?

A. There are practically none.

Q. 50. Have the machines which the firm of Stebler and Gamble, and since your acquisition of the patent in suit, yourself, have made and sold been marked in any manner?

A. Yes, sir; they have been marked "Patented January 25, 1891, [56] June 9, 1903," and with the date of this reissue patent on the Robert Strain invention, the date of which I don't remember exactly, except that it was 1904.

Q. 51. I show you a copy of the patent in suit and ask you if that refreshes your recollection as to the date? A. Dated December 27th, 1904.

Q. 52. And have all of these machines which you referred to in your last answer been marked with the word "Patented" together with the date "December 27, 1904"?

A. So far as I know they have because it is an invariable rule to mark all machines plainly and in a conspicuous place with those words.

Q. 53. Are you acquainted with George D. Parker, one of the defendants in this suit?

A. I know him; yes.

Q. 54. Are you acquainted with any of the officers of the Riverside Heights Orange Growers' Association? A. Only the manager.

Q. 55. Did you ever have any conversation with the manager of that association or with George D. Parker in relation to this reissue patent, the patent in suit?

(Deposition of Fred Stebler.)

A. I have personally spoken to Mr. Russell, the manager of the Riverside Heights Orange Growers' Association and called his attention to it.

Q. 56. On what occasion?

A. Well, I have sold him these machines.

Q. 57. With the patent date on them?

A. I think so.

Q. 58. And what was the occasion of calling their attention to the patent? [57]

A. When I learned they were about to put in machines made by George D. Parker embodying the same principle.

Q. 59. Did you at that time have any conversation as to whether such machines were or were not an infringement of the patent in suit?

A. I certainly notified them that I considered them an infringement of this patent.

Mr. ACKER.—It is admitted by the defendants that complainant gave notice as to his ownership of the patent in suit and advised them that he was the owner of said patented device and that he claimed that the Parker machine was an infringement. Counsel will admit that the defendants had due notice from the complainant herein as to the device covered by the patent in suit and that he was advised that the use of the Parker machine would be an infringement of the patent in suit.

Q. 59. If I understand you correctly, then, since some time in 1903 the firm of Stebler and Gamble up to July 1909, and you yourself, as the successor of that firm, since that date, have been manufactur-

(Deposition of Fred Stebler.)

ing, selling and installing fruit sizers or graders embodying the construction set forth, described and claimed in the patent in suit? Is that correct?

A. That is correct.

Q. 60. During that time, has any other person, firm or corporation, without the license or authority of the firm of Stebler and Gamble, or of your own license or authority, since you acquired said patent, made, or sold or used machines embodying this principle? [58] A. They have.

Q. 61. What concerns or persons?

A. The H. K. Miller Manufacturing Company and George D. Parker.

Q. 62. About when did the H. K. Miller Manufacturing Company commence such infringement?

Mr. ACKER.—Objected to as immaterial and irrelevant and having no bearing upon the issues of the present controversy.

A. About two years ago.

Q. 63. My question was directed, Mr. Stebler, principally as to which infringement occurred first, the Parker or the H. K. Miller?

A. The Miller Manufacturing Company.

Mr. ACKER.—Objected to on the ground that it assumes that an infringement has taken place, which yet remains to be proven.

Q. 64. Did you take any proceedings of any kind to secure damages based upon this infringement by the H. K. Miller Manufacturing Company?

Mr. ACKER.—Objected to as incompetent, irrelevant and immaterial.

(Deposition of Fred Stebler.)

A. I did.

Q. 65. Was that by suit in this court?

Mr. ACKER.—Same objection.

A. Yes, sir.

Mr. LYON.—Complainant offers in evidence copies of the declaration, answer, findings of fact and conclusions of law and judgment of this court in the action at law [59] Number 207 in the Northern Division, in which Fred Stebler was plaintiff and the Pioneer Fruit Company defendant. Complainant also offers in evidence, bill of complaint, answer and decree in the suit in equity in which Fred Stebler was complainant and the H. K. Miller Manufacturing Company, Hazard K. Miller, and Charles C. McIntosh defendants.

Mr. ACKER.—The introduction of all documents, exhibits, and papers referred to in the offer just made is objected to as incompetent, irrelevant and immaterial, and in no manner whatsoever binding on the defendants in the present action and not relating to any of the issues involved in the present controversy.

Q. 66. You stated that you gave notice to the Riverside Heights Orange Growers' Association and George D. Parker of this patent in suit. Have either of them made or sold or used at any time any machines which you claimed to be an infringement of the patent in suit? A. Yes, sir.

Q. 67. When was the first one of these machines installed and by whom?

A. This first machine was installed at the River-

(Deposition of Fred Stebler.)

side Heights Orange Growers' Association some time about a year ago last summer. I don't know just the date but it was prior to the bringing of this suit.

Q. 68. It was installed in the packing-house of the Riverside Heights Orange Growers' Association, at Riverside, California? A. Yes, sir. [60]

Q. 69. Do you know by whom it was installed?

A. By Mr. Parker, or his men.

Q. 70. You mean Mr. Parker, one of the defendants? A. Yes, sir.

Mr. LYON.—Complainant offers in evidence, under the allegations of the answer, a copy of United States Letters Patent Number 997,468, dated July 11, 1911, granted to George D. Parker for fruit sizer or grader and ask that the same be marked "Complainant's Exhibit Parker Patent."

Q. 71. Have you, Mr. Stebler, ever examined the fruit grader which you say was installed prior to the commencement of this suit at the Riverside Heights Orange Growers' Association's packing-house at Riverside? A. Yes, sir.

Q. 72. Have you inspected the same in operation?

A. Yes, sir.

Q. 73. How many of such machines has said Riverside Heights Orange Growers' Association at the present time? A. Five.

Q. 74. How many did they have at the time of the commencement of this suit? A. One.

Q. 75. And said association has continued the use of the said machine or machines from the time of their installation? A. Yes, sir.

(Deposition of Fred Stebler.)

Q. 76. Do you know by whom the additional four machines were installed?

A. By Mr. Parker or his men. [61]

Q. 77. George D. Parker you mean?

A. Yes, sir.

Q. 78. And are these machines substantially of the same construction and interrelation of parts as shown in Complainant's Exhibit Parker Patent?

A. Yes, sir.

Q. 79. Have you examined the drawings and read the specifications of Complainant's Exhibit Parker Patent? A. Yes, sir.

Q. 80. From your inspection of the machines used by the defendant Riverside Heights Orange Growers' Association as installed therein by defendant George D. Parker, can you state how such machines compare in construction and mode of operation with the drawing and specifications of the patent in suit?

Mr. ACKER.—Objected to as incompetent, irrelevant and immaterial.

A. Practically the same.

Q. 81. I show you a photograph and ask you if you have ever seen it before?

A. You wish to know whether I have seen the photograph or the thing which it represents?

Q. 82. The photograph.

A. Yes, I have seen the photograph before.

Q. 83. Where did you first see it?

A. I think I first saw the photograph in your office but I was present when it was taken.

Q. 84. Where was that photograph taken?

A. In the packing-house of the Riverside Heights

(Deposition of Fred Stebler.)

Orange Growers' Association. [62]

Q. 85. At Riverside, California?

A. At Riverside, California.

Q. 86. And what is it a photograph of?

A. It is a photograph of the Parker orange grader.

Q. 87. To which you have heretofore referred?

A. To which I have heretofore referred.

Q. 88. When was that photograph taken, approximately? A. September 27, 1910.

Mr. LYON.—We offer the photograph in evidence and ask that it be marked "Complainant's Exhibit Photo #1."

Q. 89. I show you another photograph and ask you if you have ever seen that one before?

A. I have.

Q. 90. Do you know what it is a photograph of?

A. It is a photograph of this same machine taken from a different view.

Q. 91. Taken at the same time?

A. At the same time.

Q. 92. Does it truly represent the machine as shown from that view? A. Yes, sir.

Mr. LYON.—We offer this photograph in evidence and ask that it be marked "Complainant's Exhibit Photo #2."

Q. 93. Does the photograph, Complainant's Exhibit Photo #1 truly and correctly show the Parker machine shown therein as taken from the view therein shown. A. Yes, sir.

Q. 94. The Photograph #1 is a view looking down along the fruit run-way? [63]

(Deposition of Fred Stebler.)

A. Yes, sir.

Q. 95. And what is the view of photograph #2?

A. It is a side view taken from the side of the bins and shows in addition to the bin one side of the grade-way.

Q. 96. I show you another photograph and ask you if you know when and where that was taken?

A. That was taken at the same time as the others and of the same machine, and is a part of the same machine.

Q. 97. What part of the same machine is this?

A. It is the independently adjustable roller.

Q. 98. And what besides the roll is shown in this photograph?

A. The guides or sticks between the rolls.

Q. 99. And in what in this photograph is the roll mounted?

A. The roll is here mounted in its mounting complete including the brackets and adjusting screws.

Q. 100. Is this one of the rolls, brackets, adjusting screws and sticks taken from the machine?

A. Yes, sir, taken right out of the machine and taken out doors and photographed.

Q. 101. Why was it taken outdoors to photograph? A. To get a better light.

Mr. LYON.—We offer this photograph in evidence and ask that it be marked “Complainant’s Exhibit Photo #3.”

Q. 102. I show you another photograph and ask you if that was taken at the same time that you have just testified to? A. Yes, sir.

(Deposition of Fred Stebler.)

Q. 103. Of the same machine? [64]

A. Yes, sir.

Q. 104. And what view of the machine does this show?

A. That shows one side and one end, one side of the feed end or end on which the fruit enters the machine and shows more clearly the independent adjustable roller in its mounting in place on the machine, where it is used including the roller itself, its brackets carrying the rollers and adjusting screws adjusting the brackets.

Mr. LYON.—We offer this in evidence and ask that it be marked “Complainant’s Exhibit Photo #4.”

Q. 105. You say, Mr. Stebler, that you have been engaged in the manufacture and sale of fruit-packing machinery for the past twelve years. Prior to that time, in what business were you engaged?

A. I had followed the trade of machinist for a number of years prior to that time and during much of that time had been engaged in experimental machines and developing inventions for others.

Q. 106. Had you ever invented anything yourself?

Mr. ACKER.—Objected to as incompetent, irrelevant and immaterial, except in so far as it may be inventions relating to this particular type of machines.

A. Yes, I had taken out at least one patent prior to that time on my own invention.

Q. 107. Did that patent refer to fruit-packing machinery?

(Deposition of Fred Stebler.)

A. No, sir, that referred to wire fence machinery.

Q. 108. And you had been working on inventions and the development of them for how long prior to going into the fruit-packing machine business?
[65]

A. Oh, during all of my machine-shop experience I have had more or less experience in that kind of work but more particularly the last two years prior to engaging in the fruit-packing machinery.

Q. 109. Where was that?

A. That was at Joliet, Illinois.

Q. 110. With what concerns?

A. Humphrey and Sons and Bates Machine Company.

Q. 111. In what were they engaged?

A. They were engaged at that time more particularly in wire-making machinery, I should say, wire-handling machinery.

Q. 112. Will you now describe to us the mode of operation of the device of the patent in suit.

Mr. ACKER.—The question is objected to on the ground that the patent itself is the best evidence of the operation, construction and arrangement of the machine therein illustrated.

A. You refer to the Robert Strain Patent, of course?

Q. 113. Yes, sir.

A. Well, in packing fruit for market, especially oranges, it has been found advisable to assort them for sizes as they come from the orchard, of course, greatly varying in size, and I suppose for a number

(Deposition of Fred Stebler.)

of years prior to my advent into it mechanical devices of various kinds had been employed for this purpose. I have already described the machine that I went to work with and pointed out one of its chief objections, which was inability to adjust and regulate the sizes of fruit as sorted by this machine, owing to its inherent construction. I have also noted [66] the desirability of finding some means to overcome this objection and when it was presented to me I was not slow in recognizing its value and availing myself of it. To describe the construction of this particular machine, I will say that the fruit is fed into it at one end from some suitable means and as it is carried along the machine the machine itself assort it into varying sizes which is accomplished by allowing the fruit to drop, roll or pass through the graduated apertures between the grading members. All prior machines of this character so far as I know employed this principle, but it was the possibility of more completely regulating the sizes as produced by this particular machine that gave it its value and it was the only machine that had ever been placed up to that time in which these sizes could be separately regulated independent of each other, a fact which was at once recognized by every orange packer. I might say its value in this respect was recognized at the same time also, so much so that it at once became not only the leading machine but about the only machine there was any demand or sale for and it has so continued to the present time.

(Deposition of Fred Stebler.)

Q. 114. What, Mr. Stebler, is the reason for the requirement that the different grades be independently adjustable?

A. The reason is the different varieties of fruit will pack or fill a receptacle differently through a given sized aperture, hence the necessity of regulation here. This is not always equally true on all adjacent sizes [67] and some will require more regulation than others. Then again, each and every packer being engaged in operating his own individual business, has his own caprices as to how his fruit is to be packed and he prefers means whereby he can control this absolutely himself rather than being bound by the caprices of the manufacturers of some given machine in which he is limited to the adjustments provided in this particular machine by the manufacturers and of which he cannot, of course, avail himself as far as he would like.

Q. 115. Now, with relation to the delivery of the sized oranges to various bins, what relation does the employment of the individual, independent adjustment of each roller, as set forth in the Robert Strain invention, have?

A. In answering that I will say that another advantage that I might have mentioned in answering the previous question is, that there are times when it is found advisable or desirable to shift one or more sizes of fruit longitudinally or lengthwise of the grader to one or more bins, which is another object

(Deposition of Fred Stebler.)

Q. 116. Why is this advisable or desirable, Mr. Stebler?

A. Well, when this machine first came out, and up to recently, when we found other means to take care of it, the fruit would oftentimes run largely to a few sizes, for instance; if they had an excess of large sizes they probably had none at all of the small sizes and they would therefore have one or more empty bins, which, [68] unless the sizes could be readily shifted on the sizer could not be utilized and the packer was therefore faced with the problem of unoccupied space which he could not use although he might be crowded with business, from which result, he must necessarily face some pecuniary loss until this unoccupied space could be made available. It was therefore possible to shift some particular sizing rollers in this Robert Strain invention whereby this unoccupied space could be utilized by shifting into the unoccupied space some of the excess sizes from their bins which were overflowing. This was done by temporarily closing in the rollers of this particular excess size and opening the adjacent one to it.

Q. 117. And why, Mr. Stebler, was it desirable to distribute the fruit all along the bin space?

A. In order to enable the packer to keep up with his expected output.

Q. 118. And how did that enable him to keep up with his expected output?

A. By distributing the fruit along the bins in order to get more help to it.

(Deposition of Fred Stebler.)

Q. 119. You mean help in packing the oranges?

A. Yes, sir.

Q. 120. I understand that after the oranges have been segregated as to size and distributed into the bins along the grader, employees pick the oranges from these bins and wrap them in paper and pack them in orange-packing boxes?

Mr. ACKER.—I object to the question on the ground that [69] it is leading and suggestive.

A. Yes, sir.

Q. 121. You say that you are familiar with the defendant's machine. Will you now compare its interrelation of parts and mode of operation of this machine with the device of the Complainant's Exhibit Patent in Suit?

A. Having previously described the mode of operation of the patent in suit I will say that defendant's machine operates in practically the same manner. The fruit being fed onto that from one end from some suitable means and is carried along the grade-way until it comes in contact with an aperture between the grading members which will allow it to pass through. The grading members in defendant's machine, as in the patent in suit, being composed of a traveling belt and a series of end to end independently adjustable rollers.

Q. 122. Calling your particular attention to the parts marked "36" in Figure 4 of the Exhibit Parker Patent and also illustrated and shown in Complainant's Exhibit Photo #3, what function do these parts perform in defendant's machine?

(Deposition of Fred Stebler.)

A. They merely close up the aperture in the grade-way between the grading elements.

Q. 123. And what correspondence do you find with these parts to any part of the device of the patent in suit?

A. They would correspond to the rollers in the patent in suit when closed up likewise to close up the aperture to prevent fruit passing through.

Q. 124. In the manner you have heretofore referred to when [70] it is desired to carry one grade of fruit over to the next bin? A. Yes, sir.

Q. 125. Approximately how long, Mr. Stebler, are these fruit graders?

A. They vary all the way from eighteen to forty-five feet in length.

Q. 126. And what is the modern length?

A. The average modern length is about thirty-two to thirty-six feet long.

Q. 127. And how many different grades or sizes of oranges are ordinarily separated in this sizing operation? A. Ordinarily ten.

Q. 128. Will any orchard run as run over this machine be separated into ten sizes?

A. Unless otherwise adjusted; yes.

Q. 129. Do they ordinarily find in a run of oranges some of each of these ten sizes?

A. Ordinarily, yes.

Q. 130. In the drawing of the patent in suit there is illustrated a rope belt, while in defendant's machine as shown in the photograph and also as illustrated in the Parker Patent a flat belt is used. What that can be attained in the patent in suit.

(Deposition of Fred Stebler.)

difference in mode of operation does this difference effect?

A. It makes no material difference, with the round or flat belt in use so far as the sizing is concerned.

Q. 131. In the original Ish patent which you stated you obtained and under which you manufactured, and which you have termed your Ish or California grader, was a rope [71] or flat belt shown?

A. The original Ish patent shows a flat belt.

Q. 132. And based upon your experience in this orange grader art, what have you to say as to whether or not the round or rope belt and the flat belt are equivalents or substitutes for this purpose?

A. I have already stated that there is no material difference between them so far as the sizing is concerned, from which I consider that they are practically equivalents in this instance.

Q. 133. The original Ish patent that you referred to was involved in litigation with the H. K. Miller Manufacturing Company, who were manufacturing a machine at that time substantially identical with the patent in suit. Is that true?

A. That is true.

Q. 134. And in that litigation the Court held that the rope belt and the flat belt were equivalents?

A. Yes, sir.

Mr. ACKER.—I will ask counsel for complainant to specify on the record at this time which of the series of ten claims of the letters patent in suit he holds to be infringed by the defendants herein.

(Deposition of Fred Stebler.)

Mr. LYON.—Claims one and ten of the patent in suit.

By agreement of counsel, the taking of the deposition was at this point continued until one-thirty o'clock P. M. of the same day. [72]

At one-thirty o'clock P. M. of the same day, at the same place and with those persons present as noted at the beginning of the taking of these depositions, the following proceedings were had:

Mr. LYON.—You may cross-examine, Mr. Acker.
Cross-examination.

(By Mr. ACKER.)

XQ. 1. What year did you establish yourself in business in this territory, Mr. Stebler?

A. In 1899.

XQ. 2. Did you manufacture and sell fruit graders in 1899? A. Yes, sir.

XQ. 3. And during the years 1900, 1901 and 1902?

A. Yes, sir.

XQ. 4. Approximately, what was the extent of your business in connection with the fruit graders during those years?

A. I did business with practically all of the leading packers in California in that time.

XQ. 5. Did you practically supply the market for graders during those years? A. Yes, sir.

XQ. 6. What was the character of the grader which you placed on the market in 1899, 1900, 1901 and 1902? A. The rope grader.

XQ. 7. What was the construction of the rope grader?

(Deposition of Fred Stebler.)

A. I have described that in my testimony this morning.

XQ. 8. Please describe it again.

A. It was a grader in which the grade-way was made up [73] of two travelling ropes or belts traveling in a divergent path with the fruit between them.

XQ. 9. In what manner did the graded fruit escape from that form of grader?

A. It dropped through apertures between the carriers.

XQ. 10. In that class of grader, the ropes, as I understand it, constituted the grading members?

A. Yes, sir.

XQ. 11. Did the rope grader constitute the only form of grader that you constructed during those years? A. Yes, sir.

XQ. 12. What form of grader did you put on the market in 1903?

A. It was about that time that we acquired the Ish patent.

XQ. 13. That is the device that is known as the California grader? A. Yes, sir.

XQ. 14. What was the construction of that grader?

A. That was the machine which I described this morning in which the grade-way was made up of the traveling belt and the rigid roller.

XQ. 15. What position did the traveling belt occupy relative to the roller?

A. It was alongside of it.

(Deposition of Fred Stebler.)

XQ. 16. Parallel?

A. Not parallel exactly, not necessarily parallel. I don't know but what it was parallel, or approximately so.

XQ. 17. In that form of a grader the rope and the roll constituted the grading run-way? [74]

A. Grade-way; yes, sir.

XQ. 18. Was there only one roller involved in the California grader? A. It constituted one roller.

XQ. 19. Did you ever put it on the market with more than one roller? A. No.

XQ. 20. What do you mean by one roller?

A. I mean one roller the whole length of the machine.

XQ. 21. Did you ever put a roller on the market constructed of more than one roller?

A. Not until we got the Robert Strain invention.

XQ. 22. You never placed on the market a grader where the grading member comprised one or more rollers until you acquired the Strain patent? Is that correct?

A. I have already testified that we placed on the market the California grader in which the grade-way consisted of one roller.

XQ. 23. And only one roller?

A. Only one roller.

XQ. 24. Can you make a sketch, Mr. Stebler, of that roller to which you have reference?

A. I can make a rough sketch. I don't know whether I can show what you want or not. It was simply a roller having increased or decreased di-

(Deposition of Fred Stebler.)

ameters as it advanced.

XQ. 25. In other words, it was simply a stepped roller? A. Yes, sir.

XQ. 26. And only one stepped roller? [75]

A. Yes, sir.

XQ. 27. Did you ever place on the market prior to your acquisition of the Strain patent, and I mean by you the firm of Stebler and Gamble as well as yourself, where more than one stepped roller was employed?

A. No, sir. Well, of course, on the double machine there was two grade-ways.

XQ. 28. I mean in one grade-way.

A. Yes, sir.

XQ. 29. Have you any knowledge of any fruit grader that was on the market in this section prior to the acquisition by you or your firm of the Strain patent wherein the grade-way comprised more than one roller? A. No, sir.

XQ. 30. And you have no knowledge of any such device being used? A. No, sir.

XQ. 31. Then, as far as you are concerned it was absolutely new in the art with the introduction to you of the Strain patent device, a grader having a run-way, one member of that run-way consisting of two or more rollers? Is that correct?

A. Yes, sir, that was new.

XQ. 32. I believe you testified in your direct examination that you were familiar with the different types of graders used in the various packing-houses in Southern California? A. Yes, sir.

(Deposition of Fred Stebler.)

XQ. 33. Are you acquainted with the type of grader that [76] was used at the packing-house of the Upland Citrus Association prior to last summer, the summer of 1911? A. I certainly am.

XQ. 34. Please describe that form of grader.

A. Well, it is a sizer in which the grade-way was made up of a traveling belt and a graduated or stepped roller.

XQ. 35. And only one roller?

A. And only one roller.

XQ. 36. Was that roller made in sections?

A. That roller was possibly made in sections, yes.

XQ. 37. Do you know whether it was made in sections? A. I don't know definitely.

XQ. 38. Did you examine it?

A. I may have examined it but I don't know about that.

XQ. 39. Do you draw any distinction in making your answers, Mr. Stebler, between a continuous roller forming a part of the run-way and a roller constructed of a series of sections forming one member of the run-way?

A. It depends how those sections are put together.

XQ. 40. How do you mean? Please explain.

A. A roller can be in sections and be a continuous roller.

XQ. 41. And have your previous answers been based on that distinction? A. Yes, sir.

XQ. 42. Do you know of any fruit grader that was in use in this section of the country prior to the Strain patent wherein one member of the run-way

(Deposition of Fred Stebler.)

comprised a roller [77] constructed of two or more sections? A. Yes, sir.

XQ. 43. Please describe the construction of that device and when and where it was put in use to your knowledge.

A. I can answer that by saying that I made some of those machines in which the roller, while it was one continuous roller, yet it was made in sections.

XQ. 44. Please explain what you mean by the expression "while it was one continuous roller, yet it was made in sections."

A. Because one end of one roller fitted into the adjacent end of the next roll in such a way as to make it practically a continuous roll.

XQ. 45. You mean by that the end of one roller section constituted the bearing for the end of the next roller section? A. Yes, sir.

XQ. 46. And by your previous answers, do you mean by that device in which one member of the runway comprised a series of section—you meant to include another form of roll, that is a continuous roll?

A. I don't think I answered that question that way.

XQ. 47. How did you answer it?

A. You are now trying to make it appear that I testified that I made a roll in sections.

XQ. 48. In one of my previous questions I asked you, Mr. Stebler, and will repeat it, whether to your knowledge prior to the acquisition by you or your firm of the Strain invention there had ever been placed on the market [78] in Southern Califor-

(Deposition of Fred Stebler.)

nia a fruit grader, the grading member of which comprised a series of rollers, grading rollers. My question is, did you know of any such constructed device being on the market?

A. I think I answered that to the effect that not until the Strain patent came out.

XQ. 49. Did you know of any form of grader on the market prior to the acquisition by you or your firm of the Strain patent where one grading member of the grader comprised a rotating member and that member consisting of a series of rotating members?

Mr. LYON.—The question is objected to as vague and indefinite and unintelligible.

A. I will answer that, not until the Robert Strain patent came out.

XQ. 50. I wish you would make a sketch, Mr. Stebler, of the form of roller you knew to have been in use and the grading member for the fruit grader consisting of one or more sections of the rotating member, made in any manner whatsoever to provide a parallel or companion member for the rope or propelling belt for conveying the fruit through the grader.

A. I would rather you would prepare the sketch or drawing in the way you want it and ask me what you want to know about it.

XQ. 51. You make a sketch of the various forms of fruit graders known to you to have been on the market prior to the acquisition by you or your firm of the Strain patent or invention. [79]

A. That is considerable of a job. I don't believe

(Deposition of Fred Stebler.)

you have any idea of what the job is.

XQ. 52. I have no objection as to what the job is.

Mr. LYON.—We object to that as not cross-examination.

A. I don't think I care to tackle anything of that kind. I can't realize what you want me to do.

XQ. 53. And you refuse to make such a sketch?

A. On that ground.

XQ. 54. Describe in detail the various forms of the Ish grader which were placed on the market and known to you to be on the market prior to the acquisition by you or your firm of the Strain patent in suit.

A. There was only one form, that which I have already described.

XQ. 55. That was a grader with merely a single roll comprising one of the grading members? And that was a single stepped roll, is that correct?

A. Well, I don't think that described it accurately. I would say it was a single-stepped roll having steps on it.

XQ. 56. That was one uninterrupted structure?

A. Not always; no.

XQ. 57. How was it made when it was not an uninterrupted structure?

A. It was made in sections and the sections fastened together.

XQ. 58. When it was not made in one continuous piece then it was made in sections?

A. Yes sir. [80]

XQ. 59. And these sections were flexibly con-

(Deposition of Fred Stebler.)

nected one to the other?

A. They were flexibly connected in this sense that the rollers could be sprung out—that is, the axis of the roll could be sprung out of alignment.

XQ. 60. How many of such sections were employed? A. Sometimes one or sometimes two.

XQ. 61. Were there ever three sections?

A. Not prior to the issuance of the Strain patent, I don't think.

XQ. 62. I said prior to the acquisition by you of the Strain patent.

A. Not prior to the acquisition by me of the Strain patent.

XQ. 63. You have no knowledge one way or the other of a grader of that character having three flexible sections as the grading member?

A. Not prior to that time.

XQ. 64. Of course I do not mean manufactured by you. A. I understand.

XQ. 65. What firms were engaged in the manufacture of fruit graders between the years 1899, 1900, 1901 and 1902, other than your firm?

A. The firm making the California or Ish grader. I don't know who they were. That was the only one I came in contact with down here.

XQ. 66. What firms were engaged in the manufacture of such graders after you acquired the Ish patented grader?

A. There was the H. K. Miller Manufacturing Company at [81] Glendora.

XQ. 67. What form of grader did they make?

(Deposition of Fred Stebler.)

A. Practically the same thing as is embodied in the patent in suit.

XQ. 68. The patent in suit? That is during the years 1899, 1900, 1901 and 1902?

A. No, it was subsequent to 1899 that they made them.

XQ. 69. Can you be a little more definite as to the year? A. No, I don't think I can.

XQ. 70. Was it in 1900?

A. I don't think it was as early as that.

XQ. 71. 1901? A. Possibly in 1901.

XQ. 72. And they made a grader, I understand you to state, the same as the grader of the patent in suit? A. Yes, sir.

XQ. 73. How many of those graders did they make?

A. Something like twenty-five or thirty, I believe.

XQ. 74. When did they discontinue business as manufacturers of graders?

A. Along about nineteen hundred—your questions are rather indefinite. If I answer that question properly I would say that they only recently discontinued the manufacture of graders.

XQ. 75. What do you mean by "recently," Mr. Stebler?

A. Well, I mean about what I say. It was only, I think, within the last year.

XQ. 76. Is that the company which was involved in a suit brought by you for infringement? [82]

A. They have been involved in a number of suits brought by me.

(Deposition of Fred Stebler.)

XQ. 77. Did you have a suit against them for infringement of any greater patent owned or controlled by you?

A. I have had a number of suits against them for infringement on graders.

XQ. 78. I understand you to say you have had a number of suits? A. Yes, sir.

XQ. 79. Did they involve the infringement of fruit-grading machines? A. Yes, sir.

XQ. 80. What patents were involved in the suits?

A. This same patent that is now in suit.

XQ. 81. Did you also bring an action against them for the infringement of the Ish patent?

A. Yes, sir.

XQ. 82. When did they first begin to manufacture a grader like the grader of the patent in suit?

A. Well, we were coming to that a while ago and as I told you then I can't get that definitely. It was probably along in 1900 or 1901, as near as I can recollect. I have simply to test my memory for it.

XQ. 83. I understand you to testify that the H. K. Miller Manufacturing Company manufactured the same form of fruit grader that is embodied in the patent in suit during the year 1900 or 1901.

A. To the best of my recollection they were making their machines about that time until I stopped them. [83]

XQ. 84. About how many machines did they manufacture during the years 1900 and 1901?

A. To the best of my memory twenty-five or thirty.

XQ. 85. And they conformed in all respects to the

(Deposition of Fred Stebler.)

patent in suit? A. Yes, sir.

XQ. 86. How early in the year,—can you state how early in the year 1900 they first began?

A. No.

XQ. 87. Have you any idea how many they made in 1900? A. No, sir.

XQ. 88. Have you any idea how many they made in the year 1901? A. No, sir.

XQ. 89. What other firms outside of the one you have mentioned manufactured in this territory fruit graders or machines for the grading of fruit during the years 1899, 1900, 1901 and 1902?

A. No others.

XQ. 90. Then your firm and the Miller Company, to whom you refer were the sole manufacturers of fruit graders during the period referred to?

A. We were not exactly the sole manufacturers, but we were the only ones that were supplying the trade in this part of the country.

XQ. 91. And you supplied all graders that were required to take care of the fruit that was graded in the packing-houses in this section?

A. Yes, sir. [84]

XQ. 92. You were working at that time under the Ish patent, were you not? A. Yes, sir.

XQ. 93. And that was owned and controlled by you or your company? A. Yes, sir.

XQ. 94. What firms, other than your firm or yourself and the Miller Company, were manufacturing fruit graders during the years 1903, 1904 and 1905?

A. No others.

(Deposition of Fred Stebler.)

XQ. 95. Just the two of you?

A. Just the two of us.

XQ. 96. How about the years 1906, 1907 and 1908?

A. Well, to the best of my recollection, the same applies.

XQ. 97. And how about 1909, 1910 and 1911?

A. Well, that was about the time Mr. Parker began to think he would like to get into the game, I guess.

XQ. 98. About 1910?

A. Sometime along in there.

XQ. 99. Any other companies engaged in the manufacture of graders during 1909, 1910 and 1911 except your house and Mr. Parker or the Parker Machine Works?

A. Yes; in the last year or two there is another man down in Riverside that has been making some.

XQ. 100. What party? Give us the name of the party.

A. His name is Stevenson, J. W. Stevenson, I think.

XQ. 101. About how many graders has he placed on the market? [85] A. I don't know.

XQ. 102. Did I understand you to state that the Miller Manufacturing Company discontinued in recent years, we will say from 1909, from the manufacture of these graders in this section?

A. No; I said they discontinued within the last year.

XQ. 103. Then the entire field has been practically controlled up to the year 1909 or 1910 by yourself

(Deposition of Fred Stebler.)

and your firm and the Miller Company so far as the manufacture and sale of those graders?

A. Well, not necessarily; as I said, we furnished most of the machines.

XQ. 104. You furnished all, did you not?

A. Practically all.

XQ. 105. And in 1909, we will say, Mr. Parker came into the field, so that since 1909 there has been practically three of you supplying graders?

A. No; there is the fourth man that I just mentioned.

XQ. 106. You mean Stevenson? A. Yes, sir.

XQ. 107. Did he manufacture to any extent?

A. I don't know to what extent. I know he is in the business.

XQ. 108. Do you know of any houses or house that he has supplied with graders?

A. Yes; one or two.

XQ. 109. Practically speaking his business is small, is it not? A. Well, I suppose so; yes.

[86]

XQ. 110. You and your firm practically controlled the fruit-grader business under the protection afforded by the Ish patent, to which you have referred, until the expiration of that patent, did you not, except for infringers? A. No, I don't agree to that.

XQ. 111. Please explain why you dissent from that?

A. Well, I think the principal point of difference between us is that while I have supplied the greater number of machines used, yet I don't claim to have

(Deposition of Fred Stebler.)

controlled the business.

XQ. 112. Was there any other machines on the market during those years?

A. There was plenty of other machines to be had.

XQ. 113. Which did not come within the protection of the Ish patent? A. Plenty of them.

XQ. 114. Please describe the construction of them. You say there were plenty of them.

A. There was the Jones grader and I think one made by Hutchins or Hutchinson, and Mr. Wickson, I believe, was agent for at least three different machines, some of which, I believe, he made, and a reference to the Patent Office records discloses a great many others that I don't remember the names of.

XQ. 115. And you knew of their being on the market and being sold?

A. I don't know of their being sold. I knew they were on the market. [87]

XQ. 116. Did you know that any of them were on the market?

A. Mr. Wickson had an agency here in which I saw at one time three different kinds of sizers.

XQ. 117. What year?

A. That was probably along about 1904 or 1905, somewhere along in there.

XQ. 118. You bought the Ish patent from Mr. Wickson, did you not? A. No, sir.

XQ. 119. Who controlled the Ish patent prior to your acquisition?

Mr. LYON.—We object to the question on the ground that it does not appear that the witness can

(Deposition of Fred Stebler.)

answer it. I will state that I am perfectly willing to furnish counsel the information he desires, but I doubt the ability of the witness to state on the record satisfactorily the condition of the title to the Ish patent.

Mr. LYON.—Do you want an answer to the question?

Mr. ACKER.—He can answer it or not as he likes.

XQ. 120. Mr. Wickson placed on the market the Ish grader, did he not?

A. I don't know as to that.

XQ. 121. What form of grader did he place on the market?

A. I was just saying that he had in the show rooms here three different forms of machines.

XQ. 122. What firms were placing the machines on the market, other than your firm, after the acquisition by [88] you of the Strain patent, except the Miller Company?

A. Well, there was not anyone placing them that I know of. There was no one placing them on the market.

XQ. 123. You said in your direct examination that the Strain invention supplanted all previous types of graders. What I *have endeavoring* to ascertain from you is the machines which were supplanted by the Strain invention and the character of these machines. I will ask you to state the machines that were supplanted and the character of the machines and by what firms they were manufactured and sold in this territory.

(Deposition of Fred Stebler.)

A. There were but two types of machines in general use at that time; one was the rope grader that I have described and the other was the Ish grader, both of which were practically supplanted by the Robert Strain grader.

XQ. 124. Well, the manufacture of the Ish grader was controlled by your firm, was it not?

A. At that time; yes.

XQ. 125. And the supplanting of it was merely the placing on the market by you or your firm of the grader covered by the Strain patent, was it not?

A. Yes, sir.

XQ. 126. And you had the complete control of the Strain patent, did you not, at that time.

A. No, sir; as Mr. Gamble was—

XQ. 127. I mean you and your firm. And since the acquisition by you or your firm of the Strain patent, you have discontinued the manufacture of the earlier [89] forms, have you not?

A. Almost entirely.

XQ. 128. So that you now supply the market with what is known as the Strain grader, is that correct?

A. Yes, sir.

XQ. 129. You acquired the title to the Strain grader *on or* about the year 1902, did you not?

A. Somewhere along about there.

XQ. 130. Somewhere after the filing of the application and before the issuance? A. Yes, sir.

XQ. 131. And ever since the acquisition of the invention of the Strain patent you have placed on the market that type of grader—that is, the Strain

(Deposition of Fred Stebler.)

grader? A. Yes, sir.

XQ. 132. In your direct testimony you testified to the purchase of the Strain invention. Is it not a fact, Mr. Stebler, that you threatened to institute suit for infringement of the Ish patent if they manufactured the Strain invention?

A. I think I so testified in my direct examination.

XQ. 134. Did you testify in your direct examination that you threatened to sue the owners of the Strain patent?

A. I think I went to them and called their attention to the fact that it was an infringement.

XQ. 135. And the fact that you told them if they manufactured under the Strain patent that you would bring suit for infringement of the Ish patent had a [90] good deal to do with the sale to you, did it not? A. I don't know as to that.

XQ. 136. You have no knowledge as to that?

A. No, sir.

XQ. 137. You are informed as to the amount of grading of fruit and the shipment of fruit that has been passed through graders in the southern portion of California in the past years, are you not?

A. No, sir.

XQ. 138. Have you any idea what the industry amounted to, that is the grading of oranges, during the year 1899?

A. Amounted to in what units?

XQ. 139. In shipments of fruit that had been graded? A. No, I have not.

XQ. 140. And you have no way of making a com-

(Deposition of Fred Stebler.)

parison from year to year as to the growth of the industry? A. No, I don't follow that.

XQ. 141. Can you state whether there are more graders in use at the present time than there were in the year 1900?

A. Yes, there are more graders in use.

XQ. 142. Approximately, what is the increased number? A. That I cannot tell you.

XQ. 143. How do you know there are more in use?

A. I couldn't help knowing that.

XQ. 144. That is you know that you have sold more in recent years?

A. Yes, sir; I have sold more in recent years.

[91]

XQ. 145. The supply of graders has kept pace with the increase in the shipment of fruit, has it not?

A. Yes, sir.

XQ. 146. Can you state how many of the Strain sizers you sold during the year 1903?

A. No, sir.

XQ. 147. 1905? A. No, sir.

XQ. 148. Do you know what the yearly sales were for those years, or the average sales?

A. Not for those years, no.

XQ. 149. You have no way of basing an estimate?

A. Not here.

XQ. 150. Do you know whether you sold more during the year 1908 than you sold during the year 1910? A. No, sir.

XQ. 151. And you have no way of testifying at the present time that you sold more in 1908 than you

(Deposition of Fred Stebler.)

sold in 1904? A. No, sir.

XQ. 152. How many machines did the Strain Grader supplant during the year 1903?

A. That I don't know.

XQ. 153. 1904? A. I don't know that.

XQ. 154. 1905? A. I don't know.

XQ. 155. 1906? A. I don't know. [92]

XQ. 156. 1907? A. I don't know that.

XQ. 157. 1908? A. Same answer.

XQ. 158. 1909? A. Same answer.

XQ. 159. 1910? A. Same answer.

XQ. 160. 1911? A. Same answer.

XQ. 161. And you have no means of arriving at the extent of this so-called supplanting of prior machines by the Strain invention?

A. Not at present.

XQ. 162. Then how *is that* you were able to state on direct examination that it had supplanted the former machines?

A. Because I took them out and put in the others.

XQ. 163. The ones you took out were the Ish graders, were they not, or the California graders?

A. Not all of them.

XQ. 164. What was the size of these graders as to length that you say were supplanted by the Strain grader?

A. You wish to know what the size of the machines were that we put in?

XQ. 165. What the size of the ones you took out?

A. You refer to the Ish machine?

XQ. 166. I refer to the machines that you stated

(Deposition of Fred Stebler.)

that the Strain grader supplanted. [93]

A. As I understand your question you referred particularly to the Ish machine.

XQ. 167. I am referring now to the machines that you say were supplanted by the alleged Strain invention.

A. I have already testified that the Strain grader supplanted not only the Ish machine but also the rope grader.

XQ. 168. I so understood you to testify.

A. Now, what is your question?

XQ. 169. My question is what was the length of those machines?

A. The rope machines run anywhere from eight to probably forty feet in length.

XQ. 170. How about the California?

A. The California or Ish machine ran anywhere from eight to ten feet in length.

XQ. 171. How many grades of fruit did the Ish machine take care of?

A. Does your question refer to grade in size or grade for quality?

XQ. 172. Size.

A. The Ish machine took care of the usual number, ten sizes.

XQ. 173. By the Ish you mean the California as well? A. Yes, sir.

XQ. 174. What was the length of the grader which you placed on the market?

A. It runs anywhere from twenty to forty feet in length.

(Deposition of Fred Stebler.)

XQ. 175. What was the reason for that excessive length, [94] forty feet?

A. Because different customers have different requirements.

XQ. 176. Is it mainly due to the fact that you were to handle a greater quantity of fruit?

A. Largely, yes.

XQ. 177. Did the California grader take care of the normal pack of the houses in which it was used?

A. It did at the time but the normal pack outgrew the grader finally.

XQ. 178. And your grader was increased in length to take care of the increased quantity of fruit to be graded? A. Partly.

XQ. 179. Well, for what other reason?

A. Because it was more desirable to have the machine of greater length.

XQ. 180. Why?

A. Well, you could get better results from it and avoid the rubbing and bruising that was consequent to the use of the short sizer on the long bins. With our long sizer we carried the fruit right to the bin and avoided bruising it.

XQ. 181. What was the occasion of this bruising which you refer to?

A. Because where the sizer was so short that they had to have bins longer than the machine and they had to roll the fruit from the sizer to the bins down long inclines.

XQ. 182. Did you manufacture and place on the market the first grader under the Strain invention?

(Deposition of Fred Stebler.)

[95] A. No, sir.

XQ. 183. Who did?

A. I think Mr. Strain did himself.

XQ. 184. What was the size of that grader, do you know?

A. It was about thirty feet in length.

XQ. 185. How did the Strain invention prevent the bruising of the fruit?

A. Because it avoided rolling it down these long inclines.

XQ. 186. Is that what avoided the bruising?

A. Not only that but in the short machine very often the fruit had to be dropped anywhere from one to three feet right straight down.

XQ. 187. What was the object of imparting rotation to the rolls in the Strain invention?

A. To prevent the fruit pinching.

XQ. 188. Would the fruit pinch if rotation was not imparted to the rollers?

A. It would if the roller was not free to rotate in some manner.

XQ. 189. Is that the reason why Mr. Strain gave a power drive to the rolls of the Strain invention?

A. Partly the reason.

XQ. 190. You, not being the inventor of the device yourself, possibly you do not know?

A. No, sir.

XQ. 191. For what length of time did the Miller Company continue to manufacture the California grader?

(Deposition of Fred Stebler.)

A. They did not manufacture the California grader.

XQ. 192. What was the first type of grader that the Miller [96] Company placed on the market?

A. It was more on the order of the machine shown in the patent in suit.

XQ. 193. When did they discontinue the manufacture of that machine, if they discontinued at all.

A. I can't give you that from memory definitely.

XQ. 194. In answer to one question on direct examination you stated amongst other advantages for the Strain invention was this ability to shift one or more sizes of fruit longitudinally or lengthwise of the grader to one or more bins and that such object was attained by the patent in suit. I did not quite follow you on this phase of the case, and would ask that you make it a little more explicit as to how that result was attained.

A. I will say, first, that the specifications of the Strain patent make that clear. For your information it is only necessary to close in the roller of the size which you wish carried by and, of course, it will be carried by. In other words, you close up that aperture of that particular roll and make out of that roll really an obstruction or stick.

XQ. 195. That is you drop that roll?

A. Not necessarily drop it, you simply close it up near the belt.

XQ. 196. Then the belt and the roller in the position you mentioned forms a nongrading space, is that so? A. Possibly.

(Deposition of Fred Stebler.)

XQ. 197. If you made the second roller a non-grading space then you would shift from the first roll to the [97] third roll, is that the idea?

A. That would be the result of it; yes.

XQ. 198. What would become of the fruit that was intended to go through the space or aperture controlled by the second roller?

A. That would go into the third.

XQ. 199. That would result in bin number Three having two grades of fruit? A. No, sir.

XQ. 200. Supposing in a run of fruit that you had an excess of one size of fruit and only a limited quantity of the other, we will say, for instance, size number two, and the bin of the fruit number one was becoming overcrowded and you should block out the roller of the number one size, would that not result in bin number two having two different sizes or grades of fruit in it?

A. It is assumed in taking advantage of anything of that kind that the bins, that the bins are not only made adjustable by changing the partitions but that you have an excess number of them so that you can put in more of them.

XQ. 201. Does that appear in the patent in suit?

A. Possibly that does not appear in the patent.

XQ. 202. Will you examine the patent and ascertain whether that appears in the patent? Examine the patent, Mr. Stebler, and ascertain whether or not that appears from the disclosures of the patent.

A. Well, that is accounted for here in this way.

(Deposition of Fred Stebler.)

XQ. 203. Where are you reading from, Mr. Stebler?

A. Beginning at line sixty, page one. Well, I don't know. Yes, he says, "Below the grade-rollers are as many bins V as there are grade-rollers." In practice we put in as many bins as we wish.

XQ. 204. Well, is that all the knowledge you have, what was contained in your answer?

A. Why, certainly.

XQ. 205. That knowledge which you gave in your last answer is acquired from the reading of this patent?

A. No, sir; I did not get it from reading the patent.

XQ. 206. Then the patent is silent as to that?

A. No, sir.

XQ. 207. In what way, is it not?

A. In practice we used as many partitions, that is, you partitioned off one bin for each roller.

XQ. 208. My question is where you find in this patent any statement that you can cut out one size if there is an excess running to one bin?

A. He says, "By having short-grade rollers separately adjustable very fine grading can be done and more than one roller may be adjusted to the same grade, if desired."

XQ. 209. And do you understand that by the expression, "that one roller may be adjusted to the same grade, if desired," that that is a disclosure that you can block out one roll and make it a non-available space?

(Deposition of Fred Stebler.)

A. Your question is not clear to me, and if it is your intention to quote from the language of the patent, you have not done it. [99]

XQ. 210. I think I have quoted exactly from the patent.

A. As I read it it says, "More than one roller."

XQ. 211. Is that what separates us, Mr. Stebler? I will ask you this question, in place of the other: Do you understand by the expression, "By having short-grade rollers separately adjustable very fine grading can be done and more than one roller may be adjusted to the same grade, if desired," to be a disclosure that one roller may be blocked out and an unavailable space may be provided to take care of excess fruit or run of one grade of fruit?

A. That is what it means.

XQ. 212. I mean in this language?

A. Yes, sir, that is disclosed in the patent.

XQ. 213. Explain to me, then, how the patent informs us that that may be done.

A. The inference is clear on that.

XQ. 214. When did this inference come to you?

A. I can't tell you when it came to me.

XQ. 215. What means did you provide until recently for taking care of the excess run under the Strain invention?

A. Well, we have done, as I said, we have put in the extra number of rolls or we have put in a stick beneath the roll.

XQ. 216. Does the patent say anything about the placing of a stick beneath the roll? A. No, sir.

(Deposition of Fred Stebler.)

XQ. 217. The patent is very clear that there shall [100] be a bin for each roller and not an excess number of bins? A. I don't know as to that.

XQ. 218. I would direct your attention to line 60, page one.

A. Well, it just simply states there, "Below the grade-rollers there are as many bins V as there are grade-rollers."

XQ. 219. The patent itself does not contain any statement how a pecuniary loss might be avoided in case there is an excess run of one grade of fruit over the others? A. It does in this line here.

XQ. 220. Which line?

A. "If there should be a large quantity of the fruit of a single grade intermixed with a small quantity of different grades, this feature is very desirable, as a number of bins may be filled with fruit of the same grade."

XQ. 221. That refers to the paragraph above, "By having short grade rollers separately adjustable very fine grading may be done"? A. Yes, sir.

XQ. 222. That is the feature of the fine adjustment of the rolls? A. Yes, sir.

XQ. 223. But do you consider the closing or blocking out of one roller an adjustment of the roller?

A. I don't see anything there about closing or blocking out the roller. [101]

XQ. 224. Did you not in your testimony refer to that?

A. Possibly I did because that is the way I might do it.

(Deposition of Fred Stebler.)

XQ. 225. The companion member of the fruit run-way of the Strain invention to the rope member is composed of a longitudinally disposed rotatable wall, that wall in turn consisting or comprising a series of independently rotatable members, is that not true?

A. No, I don't know that I care to describe it in that language.

XQ. 226. Well, describe it in any language that you please.

A. Suppose we describe it in the language of the patent?

XQ. 227. What is that?

A. I will read the first claim of the patent, "In a fruit grader, in combination a plurality of independent transversely-adjustable rotating rollers; a nonmovable grooved guide lying parallel with the plane which passes vertically and longitudinally through the center of said rollers and guide forming a fruit run-way; a rope in the groove in said guide and means to move said rope." Then there is claim Ten: "In a fruit-grading machine, a run-way formed of two parallel members, one of said members consisting of a series of end-to-end rolls, brackets carrying the rolls, guides for the brackets, and means for adjusting the brackets upon the guides, substantially as set forth."

XQ. 228. How is the member of the run-way opposing the rope member illustrated in the patent in suit? [102]

A. It is illustrated as a roll or roller.

(Deposition of Fred Stebler.)

XQ. 229. Illustrated as a series of rollers, is it not? A. Yes, a series of rollers.

XQ. 230. And these rollers are end to end, are they not? A. Yes, sir.

XQ. 231. And these rollers constitute a rotating wall, do they not, opposing the rope member of the run-way?

A. Well, I don't know as to call it a rotating wall would be entirely correct.

XQ. 232. Well, a rotatable wall?

A. That don't make it any better.

XQ. 233. Well, what is it?

A. It is a series of rolls.

XQ. 234. These rolls are rotatable rolls, aren't they? A. Yes, sir.

XQ. 235. And these rolls comprise the entire section between the ends of the machine, or working surface between the ends of the machine opposing the rope member, do they not? A. Yes, sir.

XQ. 236. And that entire surface is all rotatable, is it not? A. Yes, sir.

XQ. 237. There is no intervening or nonavailable space between adjacent rollers of that member of the run-way, is there? A. You can make it.

XQ. 238. I asked you if there was. [103]

A. Yes, sir, there is.

XQ. 239. Where do you mean?

A. Any one of them.

XQ. 240. Please explain to me what you mean by your last answer.

A. Well, the answer is obvious if you look at the

(Deposition of Fred Stebler.)

drawing, to anyone.

XQ. 241. It may be, but not to me. Please make it so.

A. By simply closing in one of the rollers.

XQ. 242. I understand, Mr. Stebler, if you close in one roller to block it out or put a filling stick in there that there will be a nonavailable space, but my question is, is it illustrated in the patent?

A. Yes, sir.

XQ. 243. Where is that nonavailable space?

A. Any one of them?

XQ. 244. Take the two sides of the run-way viewed from the left-hand end of the machine and indicate thereon that nonavailable space between the ends of those adjacent rollers.

A. Is it not a fact in reading these drawings that we have a right to refer to the specifications?

XQ. 245. I ask you, Mr. Stebler, in reference to the drawing. We will come to the specifications.

A. When I read this drawing I refer to the specifications.

XQ. 246. Can you read a drawing?

A. Yes, sir.

XQ. 247. Can you read that drawing?

A. I can't read it and make sense of it without referring to the specifications. [104]

XQ. 248. Do you observe any nonavailable space for grading between the adjacent ends of these rolls that I have asked you concerning? A. Yes, sir.

XQ. 249. Between the first two rollers?

A. Yes, sir.

(Deposition of Fred Stebler.)

XQ. 250. Between the adjacent ends?

A. Yes, sir. I don't get the purport of that question altogether.

XQ. 251. How are the rollers of the grading member of the Strain invention arranged relative to each other? A. End to end.

XQ. 252. What is the difference existing between any two adjacent ends of rollers?

A. Why, it is always less than the diameter of one orange.

XQ. 253. How much less?

A. Considerably less.

XQ. 254. What do you mean by considerably less?

A. I mean what I say.

XQ. 255. Half an inch?

A. It is usually a little more than that.

XQ. 256. Three-quarters of an inch?

A. About that.

XQ. 257. And that is the space that is required for the bearings of the roller ends, is it not?

A. Yes, sir.

XQ. 258. Is that what you mean by the nonavailable [105] space? A. No, sir.

XQ. 259. Now, what nonavailable space exists between the ends other than that space?

A. I begin to see what you want. I don't mean to say that there is any nonavailable space, grading space between the rollers. It is very difficult for me to understand the purport of your questions.

XQ. 260. I have found that to be true. With that understanding between us, will you please answer it?

(Deposition of Fred Stebler.)

A. Please repeat the question then.

XQ. 261. What nonavailable space for grading purposes exists or is disclosed by the drawing of the Strain patent between the ends of adjacent rollers?

A. None.

XQ. 262. Is there any provision made or shown or illustrated in the drawings of the Strain patent for a nonavailable grading space between the ends of adjacent rollers? A. No, sir.

XQ. 263. With the exception of the space occupied between the ends or adjacent ends of the rollers, occupied by the bearings, it is a continuous series, is it not, one continuous rotatable series?

A. Practically so; yes.

XQ. 264. And that rotatable surface which extends throughout the length of the machine has an impact coextensive with the rope member of the runway consisting of a plurality of rotatable members with no nonavailable [106] space between the adjacent ends of the rollers? A. That is true.

XQ. 265. What means, if any, are shown, illustrated or described in the patent in suit for imparting rotation to the rotatable grading members of the grader? A. Belting and shafting.

XQ. 266. There is a positive drive belt connection between the rollers and shafting?

A. Yes, sir; not necessarily positive, although it is a driven member.

XQ. 267. There is a drive connection?

A. There is a drive.

XQ. 268. And each grading roll of the grading

(Deposition of Fred Stebler.)

member of the grader is positively driven as illustrated and described in the patent in suit?

A. I don't think the use of the word "positive" is exactly correct. It is not a positive drive. It is a drive, but I don't say that it is positively driven.

XQ. 269. And it is driven at all times during the working moments of the grader, is it not?

A. Not necessarily.

XQ. 270. I asked if it was? A. No, it is not.

XQ. 272. The roll members of the rotatable grading member are driven from the shaft "F" by means of the power belts "L," is that not true?

A. Yes, sir.

XQ. 272. And they are driven at all times when the [107] belt is on the roll "K" of the shafting "F," is that not true? A. Yes, sir.

XQ. 273. And what is the object of imparting rotation to the rotating members of the roller "M" of the rotatable grading member?

A. Well, we think it effects a better grade besides preventing the pinching of the fruit between the grade member.

XQ. 274. If the rolls of the rotating member "M" of the rotatable grade member were not driven by driving mechanism, would the fruit pinch?

A. No.

XQ. 275. I understand you in your last answer that it would—that is unless the rolls rotated. I want to make the record clear. Was I mistaken in that? A. Please read the questions.

(Deposition of Fred Stebler.)

The two preceding questions were read by the reporter.

A. No; you were not mistaken, but the questions are not identical. In the first question, I had re-read the question was answered with reference merely to the rotation of the rolls, whereas, in the last question re-read, inference was brought to bear to the means of rotation or positive rotation of the rollers, and in order to make myself clear on that I want to state that while we prefer to drive the rollers as shown in the patent, their being mechanically driven is not altogether necessary to prevent pinching as the mere rotation of the rollers in connection with the fruit itself, if the [108] rollers are free to rotate, will accomplish the same purpose without being mechanically driven, and that is the distinction between these two questions.

XQ. 276. Would that hold good with the rope member arranged in the position shown and described and which it assumes in the drawing relative to the rotatable roller? A. Yes, sir.

XQ. 277. Arranged in that identical manner?

A. Yes, sir.

XQ. 278. Have you ever placed on the market a fruit grader where the rolls of the rotatable grading member were not driven by a belt? A. No, sir.

XQ. 279. And those you have placed on the market have been driven by this driving mechanism?

A. Yes, sir.

XQ. 280. And in the manner displayed in this patent? A. Practically; yes.

(Deposition of Fred Stebler.)

XQ. 281. And you are positive that if the members are arranged as illustrated in the drawing and as called for in claim one of the patent in suit and the driving mechanism shown in the patent is eliminated there will be no pinching of the fruit?

A. Yes, sir; and I am positive for the reason that I have not only determined it by actual use but I have seen this machine run for days in packing-houses with this belt off the roll.

XQ. 282. And this was in what packing-house?
[109]

A. Mr. E. K. Benchley's packing-house at Fullerton.

XQ. 283. Is that all?

A. No; I saw it in the packing-house of C. C. Chapman, at Fullerton.

XQ. 284. How long did you observe that machine running in that abnormal condition?

Mr. LYON.—The question is objected to on the ground that it assumes a fact not testified to either by the witness or appearing from the facts of the case, that it is an abnormal condition.

A. Oh, I watched it for probably ten minutes, and I remember at one of these instances calling the attention of someone to it, and although they were connected and employed in the packing-house and to some extent were at least responsible, they paid no attention to it, and it seemed to them that it was of no consequence.

XQ. 285. That was some of the workmen?

A. Yes, sir.

(Deposition of Fred Stebler.)

XQ. 286. And it is by reason of that fact that you consider that it is needless one way or the other?

A. By reason of that fact I am free to state that it is not positively necessary to mechanically drive the rollers to prevent pinching the fruit.

XQ. 287. How many sizes of fruit are graded in the grader of the Strain invention?

A. We make them for anywhere from eight to fourteen sizes.

XQ. 288. What is the normal or average number of grades?

A. The normal or average number is ten sizes.

[110]

XQ. 289. And how many rolls do you provide for those ten sizes? A. Ordinarily ten.

XQ. 290. What becomes of the fruit that goes over the discharge end of the grader where you have ten rollers?

A. In this machine, as constructed, there is no fruit goes over the end of the grader.

XQ. 291. And you have ten bins and ten rollers?

A. Yes, sir.

XQ. 292. If you cut out one roller, what becomes of the fruit that would ordinarily drop through the space occupied by that roller?

A. The grade is either cut out entirely, for the reason that there is probably little or none coming, or it is shifted along to another bin.

XQ. 293. If it is cut out entirely then that leaves nine; is that correct?

A. That would leave nine.

(Deposition of Fred Stebler.)

XQ. 294. If you have the ten grades and you cut out one grade, or one roller, and there are ten grades passing through the machine, that is, ten graduated sizes of fruit, in reality you only make nine grades?

A. Yes, sir.

XQ. 295. And one grade is intermixed with another grade?

A. Well, very often there is none of that grade coming.

XQ. 296. In your answer on direct examination, of which I have had the stenographer make a copy, in speaking of this cutting out feature, you stated, "until recently when we found other means of taking care of it," referring [111] to excess grades of fruit. What other means have you employed?

A. That had reference to our recent adaptation of a carrying belt between the sizer and the bins whereby we were able to effect a distribution of the fruit as it came from the grader.

XQ. 297. That is not shown in the patent?

A. No, sir.

XQ. 298. In the Ish or California grader was the rotatable grader member driven by a belt?

A. Yes, sir.

XQ. 299. And did that device crush or bruise the fruit, that is, between the traveling member of the run-way and the rotatable member? A. No, sir.

XQ. 300. To that extent it took care of the fruit in the same manner as the construction of the grading run-way of the Strain patent, under consideration, did it not? A. Yes, sir.

(Deposition of Fred Stebler.)

XQ. 301. Is it possible to shift the rotating members of the rotatable grading element of the Strain invention longitudinally relative to each other?

A. No, sir.

XQ. 302. In describing the operation of this fruit grader you have stated in your brief description as to the working thereof, that the fruit was fed in any suitable manner into the machine and carried along the grade-way until it came to an aperture which allowed it to go [112] through. Did not that same operation take place in the working of the California grader? A. Yes, sir.

XQ. 303. And the fruit was fed into the run-way until it came to the appropriate opening for its size and then escaped between the rotating member and the longitudinally moving member? A. Yes, sir.

XQ. 304. So in the California machine, to which you have referred, you had a grader comprising a run-way consisting of a longitudinally traveling member, that is, a rope, and a longitudinally disposed rotatable member, and through apertures existing between the two members the fruit escaped as it was propelled along the run-way; is that correct? A. That is correct.

XQ. 305. And to that extent the Ish or California grader differed from what has been termed the rope grader, did it not? A. No, sir.

XQ. 306. Did the rope grader—you say it did not. Did the rope grader have the longitudinally disposed rotatable member? A. No, sir.

XQ. 307. Then the California grader did differ

(Deposition of Fred Stebler.)

from the rope grader, did it not?

A. It was in reference to the machine itself not the distribution of the fruit.

XQ. 308. And that difference was due to the fact [113] that in the California grader there was a longitudinally disposed rotatable member on the runway opposing a longitudinally movable member, whereas in the rope grader there was no longitudinally disposed rotatable member; is that correct?

A. So far as the mechanical construction of the two machines is concerned, that is true.

XQ. 309. Do you know or can you state for what length of time the California grader was used in the packing-house of the Upland Citrus Association?

A. No, I cannot definitely.

XQ. 310. Can you approximate, Mr. Stebler?

A. Well, I think they had one or more of those machines in use when I came here, and I think they were only removed two years ago.

XQ. 311. And those machines took care of the grading of the fruit that was packed in that packing-house? A. I presume so.

XQ. 312. Now, do you know of any other machines during that time that were in use in the said packing-house?

A. Yes; they had another machine in there. It was made by the H. K. Miller Manufacturing Company. It was the same style of machine as I have just testified to as being made practically the same as the machine disclosed in the patent in suit.

XQ. 313. Was that in use at the time you came

(Deposition of Fred Stebler.)

here? A. No, sir.

XQ. 314. Do you know how many of the California graders [114] they had in use? A. No, sir.

XQ. 315. Do you know whether they had more than four? A. No, sir.

XQ. 316. Did the Upland Citrus Association grade a large number of oranges per year?

A. Yes, sir.

XQ. 317. It is one of your largest packing-houses?

A. Yes, sir.

XQ. 318. Do you know what type of grader was being used up to the year 1911 by the Arlington Heights Fruit Company? A. At what point?

XQ. 319. At their plant at Arlington?

A. Yes, sir.

XQ. 320. What form of grader was it?

A. They had one of those Ish or California graders, at least one of which I made myself; they had one Strain grader similar to the machine covered by the patent in suit.

XQ. 321. These machines were used for the grading of their oranges up until the time the packing-house was destroyed by fire, were they not?

A. Yes, sir.

XQ. 322. I understood you to testify that you had no knowledge as to whether the output of oranges in the years 1900 and 1901, and which were being graded by other than the Strain invention, exceeded the output for the years 1902 and 1903; is that correct? [115]

A. I said so, speaking from memory; yes.

(Deposition of Fred Stebler.)

XQ. 323. What provision, if any, was made in the Strain invention of the patent under consideration as to the adjustability of the bins for receiving the graded fruit?

Mr. LYON.—Objected to as incompetent, not the best evidence, the patent speaking for itself, and as not cross-examination.

A. According to the reading of the specifications the bin bottoms were self-adjustable.

XQ. 324. Please indicate in the patent where that appears.

Mr. LYON.—Same objection.

A. Beginning at line just above 65, "In order to prevent the fruit from being bruised, in each bin is mounted an apron, W, of strong cloth, the inner end of which is higher than the outer, so that the fruit will roll to the outer end of the bin, where it has but a short distance to fall to reach the bottom of the bin. Each edge of these aprons is fastened to a rope X, which passes over small pulleys, Y, affixed to the side of the bin, and each end thereof has a weight to hold the apron taut and to keep it in position.

XQ. 325. Does that language state, or do you imply from that language, that the bins are adjustable?

A. I imply from that that the bins are self-adjusting. I don't exactly get the importance and I don't know what you mean by the bins.

XQ. 326. My question is whether the bins were adjustable relative to the rolls. [116]

(Deposition of Fred Stebler.)

A. Your previous question did not have any reference to the rolls, I believe, and I was therefore at a loss to answer.

XQ. 327. What provision is made for the adjustability of the bins in the patent?

A. I have already testified that the bins are self-adjusting.

XQ. 328. By means of that apron?

A. And by weights attached.

XQ. 329. And how about adjustability longitudinally of the machine?

A. I don't see anything in the patent as to that.

XQ. 330. And you, as an expert and manufacturer, consider that language in regard to the aprons as calling for the adjustability of the bins and your testimony heretofore has been given under the same construction of language?

A. In reference to what?

XQ. 331. Your general testimony.

A. Well, I can but read the specifications.

XQ. 332. And has your testimony that has been directed to the specifications of the patent in suit been given based on the same construction of language as you apply to that you have just read?

A. No, I cannot answer that question in that manner.

XQ. 333. You testified awhile ago that sometimes you put extra rolls in the machine. Was I correct in my understanding of your testimony?

A. That is correct. [117]

XQ. 334. And when you put in extra rolls did

(Deposition of Fred Stebler.)

you put in extra bins? A. Yes, sir.

XQ. 335. Then there is always a bin for each roll?

A. Ordinarily so.

XQ. 336. Always so? A. Not always so.

XQ. 337. Have you ever put in more rolls than you have bins? A. Yes, sir.

XQ. 338. And have you had more bins than rollers? A. Now, I don't know about that.

XQ. 339. The patent states that there is a bin for each roll? A. I think so.

XQ. 340. So if there was more rolls, or if you embodied more rolls in your grader than you did bins, it was done for the accomplishment of some purpose other than that set forth in the patent in suit? A. No, sir.

XQ. 341. Is there any description or indication in the patent in suit that a greater number of rolls may be employed than bins or does that patent state that there is a bin for each roll?

A. I believe there is some such statement to that effect.

XQ. 342. To what effect?

A. That there is a bin for each roller.

XQ. 343. And, of course, not being the inventor of the patent, you are unable to state what the purpose [118] of the inventor was in making his device? A. No, sir.

XQ. 344. And any reason that you might give for the employment of a greater number of bins than rollers would be for some purpose of your own other than that of the invention? A. Possibly.

(Deposition of Fred Stebler.)

XQ. 345. Is it not a fact that the device of the invention covered by the patent in suit provided some means for driving each rotatable section of the rotatable grading member, in order to prevent bruising of the fruit being graded?

A. No, I would not say so.

XQ. 346. Then you have no knowledge of it one way or the other, have you?

A. Well, of course, I had nothing to do with either the invention of this machine or the drawing of the patent, consequently I am not responsible for what the parties had in mind in drawing this patent.

XQ. 347. Of course, the inventor would be the best one to speak on that subject, I presume. Do you know of any object that the inventor had in mind or which is accomplished by imparting rotation from driving means to the revolving rollers of the rotatable grading member?

A. I think I have already stated that we think and I think that it is claimed that it improves the sizing.

XQ. 348. And that you believe to be the only reason from your understanding of the invention, that is the only reason for imparting rotation to the revolving [119] rollers of the rotatable grading member during the passage of the fruit to be graded?

A. No, I don't know what the inventor had in mind when he did that; I don't know.

XQ. 349. Do I understand from your testimony that the revolving rolls are not driven by the drive mechanism for the purpose of preventing bruising or

(Deposition of Fred Stebler.)

crushing of the fruit?

A. No, I don't think I said so.

XQ. 350. I will now ask you whether the rotation imparted to the revolving rolls of the rotatable grading member by the drive mechanism is for the purpose of preventing the bruising and crushing of the fruit? A. Not altogether.

XQ. 351. Does it serve that purpose?

A. It possibly serves toward that purpose; yes.

XQ. 352. Does it serve toward that purpose?

A. Any rotation of that roller serves that purpose.

XQ. 353. Do you believe that mechanism was placed in that machine for the driving of those rolls for the purpose of preventing bruising or crushing of the fruit? A. I believe it was.

XQ. 354. Have you any knowledge one way or the other? A. No, sir.

XQ. 355. And there is nothing in the patent that would tend to advise you on that subject?

A. I see nothing in it.

XQ. 356. And you have examined it very carefully? A. I have, but not to-day. [120]

XQ. 357. You examined it very carefully before you bought it? A. Yes, I looked into it.

XQ. 358. And you again considered it very carefully before you applied for the reissue of the original letters patent, did you not? A. Possibly.

XQ. 359. Almost certain of that, are you not?

A. No, I am not.

Mr. ACKER.—That is all I have to ask for the time being, Mr. Lyon.

(Deposition of Fred Stebler.)

Mr. LYON.—If you have any further cross-examination of the witness I would prefer to have you complete it at this time.

Mr. ACKER.—That completes my cross-examination. Any further questions will be on recross-examination.

Redirect Examination.

(By Mr. LYON.)

RDQ. 1. One of the last questions asked you, Mr. Stebler, was whether you examined the original patent before buying it. I call your attention to the fact that the original patent was issued to yourself and Mr. Gamble as the assignees of Mr. Strain. With this fact in view, will you please state whether you examined the original patent before you bought it?

A. I supposed he meant the original patent that had been issued to Strain prior to the reissue.

RDQ. 2. You did not see the original patent before you bought the original patent? [121]

A. No, certainly not.

RDQ. 3. No patent had been issued, as I understand it, at the time Mr. Strain made this assignment to you and Austin A. Gamble?

A. Well, however that may be, it seems to me that I had access to his application at least in Mr. Harpham's office.

RDQ. 4. You have referred to a suit against the H. K. Miller Manufacturing Company on the Ish patent. Can you remember the date on which that was tried?

(Deposition of Fred Stebler.)

A. No, I can't remember that date. It seems to me that it was the month of November, and I think the year 1905.

RDQ. 5. For the purpose of refreshing your recollection, I will call your attention to the fact that the decision of that suit was in February, 1905. You, after the decision, made a settlement with the H. K. Miller Manufacturing Company, did you not?

A. Yes, sir.

RDQ. 6. And that settlement, for the purpose of refreshing your memory, was after I removed my office from the Bradbury Building to the present place of business, was it not?

Mr. ACKER.—I object to the character of the questions being asked on the ground that it is leading in the extreme and more than for the purpose of refreshing this witness' memory.

Mr. LYON.—The insinuation of counsel is not understood. If it is for the purpose of offense, the offense will [122] be met. I know of no right he has to assert that there is any purpose in the question other than an effort to fix a date.

A. Yes, sir.

RDQ. 7. With reference to the date when the H. K. Miller Manufacturing Company commenced manufacturing a grader substantially like that of the patent in suit, can you tell me whether that was before or after the issue of the original patent to Robert Strain which issued to yourself and Mr. Austin A. Gamble and which was reissued here in the patent in suit?

(Deposition of Fred Stebler.)

A. I think suit was commenced before the original patent was issued.

RDQ. 8. I don't think you understand my question, Mr. Stebler. Was the original patent issued before the Miller Company commenced manufacturing the grader like the one here in controversy?

A. Well, when you refer to the original patent, do you refer to the original patent issued to Robert Strain or the reissue to me and Gamble?

RDQ. 9. The original patent which was issued to you and your partner, Austin A. Gamble, on the application of Robert Strain and which was afterwards reissued?

A. I think the Miller Manufacturing Company began manufacturing before the reissuance of this patent.

RDQ. 10. Do you know under what circumstances the H. K. Miller Manufacturing Company asserted a right to manufacture the said construction of fruit grader?

Mr. ACKER.—The question is objected to as incompetent, [123] irrelevant and immaterial and not having any bearing upon the issues of the present controversy.

A. They asserted that they were manufacturing under the patent to Rayburn and which was afterwards placed in interference with Strain.

RDQ. 11. That was the patent of Charles Rayburn? A. Yes, sir.

RDQ. 12. At the time of the settlement referred to, the patent to Rayburn and the license to the H.

(Deposition of Fred Stebler.)

K. Miller Manufacturing Company were assigned to your firm of Stebler and Gamble, was it not?

Mr. ACKER.—Objected to as incompetent, irrelevant and immaterial and not proper redirect examination and as having no bearing upon the issues of this controversy.

A. Yes, sir.

RDQ. 13. Then you are able to state whether it was in 1901, 1902 or 1903 that the H. K. Miller Manufacturing Company commenced to manufacture the graders under the license with Charles Rayburn?

Mr. ACKER.—Same objection.

A. No, I cannot.

RDQ. 14. Now, with reference to the time when you first saw the Robert Strain grader involving the invention of the patent here in suit, which you say you saw at Benchley's packing-house at Fullerton, California, had the H. K. Miller Manufacturing Company at that time started to manufacture that grader?

Mr. ACKER.—Same objection, and on the further ground that it is leading. [124] A. No, sir.

RDQ. 15. You have referred in your cross-examination to the fact that more than two suits were brought by your or the firm of Austin A. Gamble and yourself against the H. K. Miller Manufacturing Company between 1903 and 1911. You have stated that one of these suits was on the Ish patent, and you stated that another of them was upon the Robert Strain reissue patent here in suit. Can you advise us what the patent or patents involved in either

(Deposition of Fred Stebler.)

of the other suits were?

Mr. ACKER.—Same objection, on the ground that it is incompetent, irrelevant and immaterial and not proper redirect examination.

A. The other was a suit on the patent issued to Robert Strain along about 1907 or 1908 for a form of grader called a belt grader.

RDQ. 16. And there was also litigation between the said firm of H. K. Miller Manufacturing Company and your firm during the period I have referred to in regard to a brusher, was there not?

Mr. ACKER.—Same objection.

A. Yes, sir.

RDQ. 17. The Ish patent on the California grader expired in 1908, did it not? A. I think so.

RDQ. 18. Has any other person, firm, corporation or association manufactured or sold or put into use any of the said Ish machines since the expiration of the said patent? [125] A. No, sir.

RDQ. 19. You have referred to a patented device which you have referred to as other means for taking care of the distribution of the fruit to the bins. That is the subject matter of the Stebler patent number 943,799, dated December 21, 1909, referred to in the pleadings and findings of fact and conclusions of law in the action at law by yourself against the Pioneer Fruit Company, is it not?

Mr. ACKER.—Objected to as incompetent, irrelevant and immaterial, and on the further ground that it is not proper redirect examination.

A. Yes, sir.

(Deposition of Fred Stebler.)

RDQ. 20. Why did you discontinue manufacturing the Ish grader?

A. Because there was no further sale for it.

RDQ. 21. Is there any particular feature of the grader of the patent in suit which has a particular present demand?

Mr. ACKER.—Same objection.

A. There is this feature of individual and independent adjustment of the various sizes.

RDQ. 22. Could that feature be secured in any of the Ish graders that you have manufactured or ever seen? A. No, sir.

RDQ. 23. You have referred to Wickson having a supply house here in Los Angeles and having exhibited three styles of graders. Did you ever see any of these three styles of graders sold or in commercial use? [126] A. No, sir.

RDQ. 24. You have referred to the use of one or more of the rolls of the grader built under the patent in suit in such manner as not to permit the separation of fruit by such roller, but simply to carry it on to a further bin. In what manner, if at all, does this use of a roller or rollers on the Robert Strain grader differ from the spacing sticks of the defendant's grader?

Mr. ACKER.—The question is objected to as not proper redirect examination.

A. Well, of course, the roller, when used in this way, that is, closed in to make a nongrading space, while it is of different detail from the spacing sticks, it performs the same function in substantially the

(Deposition of Fred Stebler.)

same manner.

RDQ. 25. Prior to the advent of the defendant's machine had the rollers of the Robert Strain grader been used in that manner? A. Yes, sir.

RDQ. 26. In a number of your answers you have referred to the rope and roller grader. Which grader do you mean by that?

A. Very often, in speaking of the California or Ish grader it is spoken of in that way to distinguish it from the rope grader.

RDQ. 27. In building the grader of the Robert Strain patent in suit, ordinarily how many rolls and bins are provided? [127]

A. Ten on either side.

RDQ. 28. Is that true in the forty-foot grader?

A. Yes, sir.

RDQ. 29. Would it, in your opinion, based upon your experience in the manufacture and the use of orange-grading or sizing machines, be practical to use as one side of the fruit run-way a stationary or nonrotatable or nonyielding surface as one side of the run-way? A. No, it is not practical.

RDQ. 30. Do you know anything of the origin of the defendant's machine?

Mr. ACKER.—That is objected to as incompetent, irrelevant and immaterial and on the usual further ground that it is going outside of any possible sort of proper redirect examination.

Mr. LYON.—In view of the objection, and that there may be no question about it, we will now assume that the witness is now called for the purpose

(Deposition of Fred Stebler.)

of further direct examination.

Mr. ACKER.—The objection is still urged.

Mr. LYON.—If you object on that ground, we will permit you to conduct any recross-examination that you desire now.

Mr. ACKER.—All right.

Recross-examination.

(By Mr. ACKER.)

RCQ. 1. You state that prior to the introduction [128] of the Parker machine, filler sticks had been used in connection with the Strain grader, or if not filler sticks, then means had been employed to block out the rollers to take care of excess grades of fruit of one kind over another. I will ask you when and where such was done?

Mr. LYON.—Objected to as not recross-examination, and further on the ground that it is not a correct statement of the witness' testimony.

Mr. ACKER.—If I am incorrect in my statement, I will ask the witness to correct me.

A. I don't think I have used the word "filler sticks" in my testimony here to-day.

RCQ. 2. I said I might be mistaken in that expression.

A. But I think I did say that sticks had been used.

RCQ. 3. In the Strain machine? A. Yes, sir.

RCQ. 4. My question is when and where and by whom?

A. In the packing-house of Stewart Citrus Association at Upland.

(Deposition of Fred Stebler.)

RCQ. 5. Was that an advantageous feature for use in connection with the Strain invention?

A. It was in that case.

RCQ. 6. And is it generally so—to be able to block out one grade of fruit?

A. It was under the conditions they had.

RCQ. 7. Did you issue instructions to purchasers of your machine, written instructions or printed instructions [129] as to how the machine can be closed for any one grade of fruit when there is an excess? A. No, sir.

RCQ. 8. That is left to the general working out in service of the users of the machine?

A. Not generally. Very often they ask it verbally and we tell them.

RCQ. 9. You stated in your redirect examination that it would not be a practical fruit grader in the form of a nonrotatable surface forming one side of the run-way. I will ask you what would be the objection to the nonrotatable or nonflexible surface as constituting one side of the run-way?

A. The traveling carrier would push the orange in there so tight, especially if it was a little soft, that is, between itself and the nonrotatable member, that it would crush it so much so as to burst the orange.

RCQ. 10. And a nonrotating surface, if employed in the Strain grader, would act to crush the fruit?

A. Why, certainly.

RCQ. 11. What degree of limitation do you place on the expression, nonrotatable surface?

(Deposition of Fred Stebler.)

A. Anything that is absolutely stationary, standing still.

RCQ. 12. And any stationary portion of the member opposing the movable member would tend to crush the fruit? A. Certainly. [130]

Mr. ACKER.—That is all, Mr. Lyon.

Re-redirect Examination.

(By Mr. LYON.)

RRDQ. 1. Upon what, Mr. Stebler, do you base the opinion which you have expressed, that it would be impractical to have the grading opening of the grader formed of a traveling rope or belt as one side and a rigid or nonmoving, nonrotatable side as the other side?

A. I base this statement, first, upon the fact that I have made experiments during my course as an orange grader builder to determine whether or not such a grader would be practical, and during the course of these experiments I very soon decided to my entire satisfaction that it was entirely impractical for the reasons stated, and furthermore, I happen to know of a man who, not knowing this, actually constructed a full-sized model machine in a packing-house for a customer, only to have to replace this stationary member with a rotating member before the man would consider the use of the machine.

RRDQ. 2. Where was this packing-house?

A. This was the Worthley and Strong packing-house in Riverside.

RRDQ. 3. Can you give us the name of the man?

A. Mr. J. W. Stevenson.

(Deposition of Fred Stebler.)

RRDQ. 4. So far as the run-way of that Stevenson machine is concerned and the grading space is concerned, what difference was there between the defendant's machine [131] here and that machine?

Mr. ACKER.—That is objected to on the ground that it is incompetent, irrelevant and immaterial, and on the further ground that it is not proper re-redirect examination, and on the further ground that there is no illustration or representation of the machine to which counsel is referring.

A. The only difference is that the defendant here uses a rotating roller, whereas Stevenson tried to use a stationary member; in fact, as I recall it, his member opposing the traveling belt was nothing but a round stick and presenting a rubber surface to the fruit, but was quite stationary except for means to adjust it to and from the traveling belt.

RRDQ. 5. Was this Stevenson machine built before the Parker machine was installed by the defendants?

Mr. ACKER.—Same objection.

A. I rather think it was.

Mr. LYON.—That is all.

Mr. ACKER.—That is all.

FRED STEBLER.

[Deposition of Arthur P. Knight, for Complainant.]

ARTHUR P. KNIGHT, a witness produced on behalf of complainant, being first duly cautioned and sworn to testify the truth, the whole truth and nothing but the truth, testified as follows:

(Deposition of Arthur P. Knight.)

Direct Examination.

(By Mr. LYON.)

Mr. ACKER.—Before taking the testimony of this witness, counsel for defendants wishes to state that he [132] will object to the entire testimony of this witness because of the presence of this witness during the taking of the testimony of Mr. Stebler, although counsel for complainant was requested to exclude this witness from the room.

Q. 1. Please state your name, age, residence and occupation.

A. Arthur P. Knight; age, forty-seven; residence, Glendale, California; occupation, patent attorney.

Q. 2. How long have you been connected with the patent business, Mr. Knight?

A. Since 1886 except for the intermission of about three years when I was in the testing department of the General Electric Company.

Q. 3. In what capacity or capacities have you been connected with the patent business?

A. Firstly, as an Assistant Examiner in the United States Patent Office for several years. Then in the Patent Department of the General Electric Company at Lynn, Massachusetts, and Schenectady, New York; subsequently for several years in New York City in patent practice, and since that time in Los Angeles in the same practice.

Q. 4. As an Assistant Examiner in the United States Patent Office, what were your duties?

A. To examine applications for patents with respect to their compliance with the requirements of

(Deposition of Arthur P. Knight.)

law as to matters of form and the novelty and patentability of the subject matter of the application.

Q. 5. Will you please be a little more explicit as to [133] what you did as an examiner as far as novelty, etc., is concerned.

A. It was my duty to compare the subject matter of the application with the state of the art as shown by the patents already issued along the same line and with patent publications along that line, to determine whether the subject matter of the application was a novel and patentable matter.

Q. 6. Are you familiar with the Robert Strain reissue patent, Complainant's Exhibit Patent in Suit? A. I am.

Q. 7. Have you ever seen any machines embodying that construction in use? A. I have.

Q. 8. Have you seen the defendant's machine in the packing-houses at Riverside, California?

A. I have; yes.

Q. 9. Did you examine it carefully?

A. Yes, sir.

Q. 10. Thoroughly familiarize yourself with it?

A. Yes, sir.

Q. 11. Do you understand the mode of operation of the device of Complainant's Exhibit Patent in Suit? A. Yes, sir.

Q. 12. Have you examined, and are you familiar with the construction and mode of operation of the device of Complainant's Exhibit Parker Patent Number 997,468? A. Yes, sir.

Q. 13. Will you please take the Complainant's

(Deposition of Arthur P. Knight.)

Exhibit [134] Patent in Suit and explain the mode of operation of the device of that patent, so far as the grading is concerned, and by that I mean eliminating from consideration the matter of the adjustable bottoms for the bins, and then compare the construction, elements and mode of operation of the device of this patent with the same in the Complainant's Exhibit Parker Patent, and in making this comparison you may make such reference as you desire to Complainant's Exhibits Photos 1, 2, 3, and 4.

A. In the grader shown in the Strain Patent in Suit, the fruit is supplied upon one end of the runway, one side of which is formed by the traveling rope or round belt and the other side of which is formed by the grading rolls, so that by the motion of the rope or traveling belt the fruit is successively brought in contact with the successive rollers. These rollers are spaced in relation to the traveling belt so as to present an aperture between each roller and the belt, the width of these apertures increasing in the case of the successive rollers so as to increase sequentially from the beginning to the end of the series of rollers. When the fruit reaches an aperture which is sufficiently large, it will pass through this aperture, and in this respect the operation is that of any successful grader, but the distinguishing characteristic in the operation of the Strain machine, as shown in this patent, is that the width of these apertures may be adjusted individually and independently for the different rollers, so that any desired variation along the length of the series may be

(Deposition of Arthur P. Knight.)

obtained. Thus, [135] in case an even-grading of the fruit is desired, the rolls may be set so that each roller is spaced a definite distance further from the rope than the preceding roller, and if any variation is desired, these rollers may be set so that the excess of difference from the rope is less in some cases than in others, and in fact, as pointed out in the patent, page 2, lines 13 to 21, the rollers may be adjusted so that more than one of said rollers is adjusted to the same grade. While the operation of this machine, in a broad sense, is similar to any grader in which the fruit is presented successively to apertures of increasing width between the longitudinally movable member and the transversely movable member, it carries out this operation in a peculiar manner, in that it enables the width of the apertures to be adjusted independently of one another throughout the length of the series of rollers, so as to provide for any desired distribution of the grading by the rollers.

In the Complainant's Exhibit Parker Patent, and the photos one to four, Complainant's Exhibits, the operation of the machine is as follows: The fruit is fed by a suitable supply means into the run-way, one member of which consists of a longitudinally traveling belt and the other member of which comprises a series of rotatable rolls. These rollers are mounted adjustably, so that the distance between each roller and the other member of the run-way, viz.: the traveling belt, can be adjusted independently and individually with the [136] different rollers. As the

(Deposition of Arthur P. Knight.)

fruit is carried along in the run-way by the traveling belt, it is presented successively to contact with the successive rollers and passes through the aperture between the roller and the belt when an aperture is presented of sufficient width to permit of such passage. The adjustable mounting of the several rollers is such that the width of this aperture may be adjusted independently and individually for the several rollers, so that any desired distribution of the grading may be provided for along the length of the grader. In respect, therefore, to the characteristic feature of the Strain patent, which I have above referred to, the manner of operation of the Parker machine is the same as that of the Strain machine. The Parker machine, however, includes an additional feature, viz. : the provision of what are called "guide-arms," shown in the drawing by the numeral 36, which are affixed to the supports for the several rollers and overlap one another so as to form fixed walls between successive rollers. By means of these guide-arms the adjustable rollers may be spaced farther apart or nearer together and may be shifted longitudinally of the machine, thereby providing for certain alleged advantageous results in distribution. These guide-arms, however, do not affect the operation of the rotating or rotatable rollers *per se*, the operation of said rollers in connection with the traveling belt coming into play only when the fruit is in contact with the rollers and the fruit at that time being out of contact with these guide-arms, so that

(Deposition of Arthur P. Knight.)

the [137] two operations are nonconcurrent and independent.

By consent of counsel, the taking of the depositions was at this time continued until Saturday, the 3d day of February, 1912, at the hour of ten o'clock A. M.

At the hour of ten o'clock A. M. of Saturday, the 3d day of February, 1912, at the same place and with the same persons present as noted at the beginning of the taking of these depositions, the following proceedings were had:

ARTHUR P. KNIGHT, a witness produced on behalf of complainant, was recalled for further examination and testified as follows:

The previous answer of the witness given just prior to the adjournment was read by the reporter.

Direct Examination (Con.).

(By Mr. LYON.)

Q. 14. Have you anything to add to that answer, Mr. Knight?

A. In other words, the guide-arms serve the purpose of conducting the fruit from each roller to the next roller and are therefore idle as far as the grading operation is concerned; their function in connection with the longitudinally adjustability of the rollers along the run-way is to provide for the determination of the several locations at which the fruit shall pass from [138] the run-way; thus the adjustment of the rollers is entirely by these guide-arms and the longitudinally adjustability of the rollers is therefore a question of location of discharge;

(Deposition of Arthur P. Knight.)

in other words, distribution and not of size or determination of the grade or the several grades.

Q. 15. You have referred, Mr. Knight, to the specifications of the patent in suit, and particularly to the statement that more than one roller may be adjusted to the same grade, if desired. In the grader of the patent in suit, what is the result of so adjusting more than one roller to the same grade?

A. The natural inference from the wording would be that if two rollers, for example, are adjusted to the same grade, that two adjacent rollers will be so adjusted rather than two rollers that are separated along the series by other rollers. If therefore, we take two adjacent rollers, adjusting them to the same grade, that is to say, so that they present an aperture of equal width between these rollers and the adjacent longitudinally traveling member, the effect will be that as the fruit runs along the run-way and is presented to the first roller, it will pass through as soon as it reaches a space which is equal to the diameter of the fruit. If the fruit were absolutely spherical and of uniform diameter throughout, it would pass through the space between the first roller and the longitudinally traveling member as soon as it comes in contact with the roller. The fruit, however, varies somewhat in diameter in different directions, [139] and as a matter of fact it would run some distance along in the usual course of events until the minimum diameter was presented to the aperture or some diameter sufficiently small to enable it to pass through. This presentation of different diameters

(Deposition of Arthur P. Knight.)

or different aspects of the fruit is produced by the longitudinal motion of the traveling member on one side, together with the resistance of the other member on the other side of the fruit, and is facilitated by the rotatability of the rollers, and in any roller of ordinary length the fruit is turned over sufficiently in the length of a single roller to insure that it will pass through the space. With rollers, therefore, properly constructed for grading, the effect of adjusting two adjacent rollers to the same grade would be that all, or substantially all, of the fruit would pass through the space between the first roller and the longitudinally moving member so that the space occupied by the second roller would be simply an idle space. Any fruit which was small enough to pass through the first roller would not be carried to the second roller. On the other hand, any fruit which is not small enough to pass through the first roller, it would not pass through the second roller, but would be carried thereby along the length of the second roller and delivered to the next roller in the series.

Q. 16. What element, then, would this second roller, set as you have stated in your last answer, correspond to in the device of the Parker patent and in defendant's machine? [140]

A. It would correspond in function to the guide-arms in the Parker patent and Parker machine, inasmuch as it is an idle or spacing member, which simply conducts fruit along the run-way without any grading operation.

(Deposition of Arthur P. Knight.)

Q. 17. In the position of the second roller as you have assumed it in your two preceding answers, you have assumed, have you not, that the second roller is carried in toward the belt, so that the aperture between the second roller and the belt is the same as between the first roller and the belt? A. Yes, sir.

Q. 18. You have referred in your answer to the guide-arms "36" of the defendant's machine as "fixed walls between the successive rollers." What do you mean by that term?

A. I mean that they are fixed in the operation of the machine in distinction to the longitudinally movable member of the other side of the run-way and to the transversely movable members constituted by the rollers of the same side of the run-way. It will be understood that these guide-arms are adjustable when setting up the machine for any particular use. When once set they are fixed.

Q. 19. Referring, now, to the Complainant's Exhibit Parker Patent, what part does this longitudinal movement of the guide-arms "36" and the longitudinal movement the brackets and rollers form in the claimed novelty of that patent?

Mr. ACKER.—It is submitted that the patent itself is the best evidence as to what function is performed by the [141] features of the patent to which attention has been directed.

A. These two features of the longitudinal adjustability of the rollers and the provision of the guide-arms are closely associated and form together the substance of the claims of the Parker patent in

(Deposition of Arthur P. Knight.)

connection with the general structure of the machine.

Mr. LYON.—You may cross-examine, Mr. Acker.

Cross-examination.

(By Mr. ACKER.)

XQ. 1. How long were you in the Patent Office, Mr. Knight, and what position did you occupy?

A. I entered the Patent Office in the summer of 1886 as Fourth Assistant Examiner and left the Patent Office in the fall of 1889 as First Assistant Examiner.

XQ. 2. What division did you have charge of?

A. I was in the Electrical Division for substantially the entire period, which was in charge of a principal examiner, the highest grade I reached was Assistant Examiner.

XQ. 3. What experience have you had in the practical operation of fruit graders of the type involved in the present controversy?

A. I have never operated a fruit grader as I suppose you mean, as a mechanic associated with the machine. I have simply watched the operation.

XQ. 4. Your knowledge has been solely derived from your observation of the machine in operation?
[142]

A. Quite so.

XQ. 5. For what length of time did you examine the defendant's machine in operation?

A. I have never seen the Parker machine in operation.

XQ. 6. And your testimony relative to the action of the Parker machine has been based on the knowl-

(Deposition of Arthur P. Knight.)

edge derived by you from observation of the Strain patent?

A. Yes, and my knowledge of mechanics as to what the operation would be, the operation of the Parker patent.

XQ. 7. Solely your knowledge of what that action should be and not from any practical knowledge?

A. Yes.

XQ. 8. I understood you to say that since you left the Patent Office you have been engaged in the profession of patent attorney?

A. Practicing before the Patent Office.

XQ. 9. In connection with what firms?

A. In connection with, associated with, the firm of Lyon and Hackley, of late years.

XQ. 10. Where is your office?

A. I have no office.

XQ. 11. Are you associated with the firm of Lyon & Hackley?

A. Only that I do what work they care to give me. I have no definite agreement with them except that I charge for my time.

XQ. 12. Is it not a fact that the advantages which you have set forth for the grader of the Patent in Suit would flow from the use of any grader wherein one member [143] of the grader comprises a traveling rope or conveyor and the opposing member, an adjustable roll?

A. Not unless the adjustability provided for individual adjustment for each size.

XQ. 13. Are you acquainted with, or familiar

(Deposition of Arthur P. Knight.)

with, the prior art relating to fruit graders?

Mr. LYON.—Objected to as not cross-examination, and notice is given that any interrogation of this witness as to the prior art by counsel for defendants will be making the witness his own, and we shall insist that he be bound by the testimony.

Mr. ACKER.—With all due respect for the statement of counsel for complainant, counsel would state that this witness has been placed on the stand as an expert and his examination will be conducted on that line and conducted as cross-examination.

A. I have examined the prior art at various times in the past, but not recently.

XQ. 14. Have you ever given testimony in any suit wherein the patent herein sued on was involved?

A. I have.

XQ. 15. And during the course of your preparation for testifying in that suit did you familiarize yourself with the prior art relating to fruit graders?

A. I did in so far as it was presented in the record of that suit.

XQ. 16. What is the form of the discharge opening of the Strain Grader of the Patent in Suit?

A. You mean the shape of the opening between the roller [144] and the traveling member?

XQ. 17. Yes. What form does that outlet for the fruit take in the patent in suit?

A. Well, if I understand your question, I would say it was not rectangular.

XQ. 18. Is it a continuous opening from the feed end of the machine to the discharge end?

(Deposition of Arthur P. Knight.)

A. Well, no; it is interrupted by the portions occupied by the brackets between the several rollers.

XQ. 19. The brackets are to one side of the rolls, are they not? A. Yes, but there is still a space.

XQ. 20. Is there a direct vertical clearance between the movable member of the run-way and the revolving members of the run-way?

A. If I understand your question, yes.

XQ. 21. And is it that vertical passage-way which is enlarged or decreased as to width by the adjustment of the members of the revolving member of the run-way?

A. It is this vertical passage-way which is enlarged or decreased in width by the adjustment of the revolving members of the run-way.

XQ. 22. What do you understand by the term "revolving," Mr. Knight?

A. The term "revolving," I think, is in the specifications.

XQ. 23. Not from the specifications, but from your knowledge generally?

A. The term "revolving" as ordinarily used means that [145] there is motion around a center.

XQ. 24. If you refer to a body as revolving, do you mean that it has continuous motion?

A. Not necessarily; it might revolve intermittently or alternately or continuously.

XQ. 25. If it revolves intermittently, it would be a rotatable body, would it not?

A. I don't know of any distinction in mechanics

(Deposition of Arthur P. Knight.)

between revolution and rotation. In astronomy there is a distinction, but in mechanics they may be used interchangeably.

XQ. 26. If I should state that an article was conveyed along a passage-way and as fed into that passage-way a movable member was revolving, what would you understand?

A. I would understand that when the fruit was in contact with the movable member that there was at least some revolution or rotation of the movable member.

XQ. 27. Of course, you understand my question did not make use of the term "fruit," did you not?

A. Then I will change it accordingly. Please read the question.

Question read by reporter.

A. Change the word "fruit" to "article."

XQ. 28. What knowledge, if any, have you of fruit graders that have heretofore been referred to in the testimony of Mr. Stebler as the California graders?

A. I have seen one of the old machines and I have seen the patent, but I do not recall of ever having seen the [146] machine in operation.

XQ. 29. You were present in the examination-room during the course of the examination of Mr. Stebler, were you not, Mr. Knight? A. Yes, sir.

XQ. 30. You heard his testimony?

A. Yes, sir.

XQ. 31. You heard the testimony that was given as to what was called the Ish or California grader?

(Deposition of Arthur P. Knight.)

A. Yes, sir.

XQ. 32. Have you ever examined the Ish or California grader? A. Only the patent.

XQ. 33. Is this the patent to which you refer as the Ish patent? (Handing witness copy of United States letters patent.)

A. Yes, sir; that is the one which I have been advised is the Ish patent, so called in trade.

XQ. 34. Have you examined that patent heretofore, have you not? A. Yes, sir.

XQ. 35. And the patent you have referred to is United States Letters Patent Number 458,422 granted to J. T. Ish August 25, 1901, for an improved fruit-grading machine? A. Yes, sir.

XQ. 36. Please examine the patent, Mr. Knight, and state whether or not it is a fruit grader one member of the grade run-way comprising a movable rope or belt. A. It is. [147]

XQ. 37. Is the opposing grading member a rotatable structure, that is, the opposing grading member of the run-way? A. It is.

XQ. 38. Is the roll member of the grader a driven member, by a power means? A. It is.

XQ. 39. Is the Ish patent device a fruit grader one member of the grading run-way of which comprises a rope or conveyor and the opposing member a revolving element? A. Yes, sir.

XQ. 40. Is that revolving element carried or mounted in brackets which are controlled or adjusted laterally?

A. The rollers are mounted in brackets, but noth-

(Deposition of Arthur P. Knight.)

ing appears in the patent to show that the brackets are adjusted laterally.

XQ. 41. Have you ever examined one of the machines made in accordance with the Ish patent in practical operation?

Mr. LYON.—Objected to on the ground of the general objection that it is not cross-examination and on the further ground that it is irrelevant and immaterial, as the question is indefinite as to the time of the building of the device inquired about.

A. I have never examined one of these machines in operation.

XQ. 42. Then you have no knowledge of the practical operation of that one way or the other? [148]

A. Not by observation.

XQ. 43. Are you familiar with the reading of drawings and the proofs of mechanical structures, Mr. Knight? A. I claim to be.

XQ. 44. I direct your attention to the photograph which I hand you and ask you if you are able to state from an examination of this photograph the character of device illustrated thereby?

Mr. LYON.—Objected to as not cross-examination.

A. This photograph shows a machine in which there is apparently a grade-way of some sort at one side of which at least is a series of rollers, each roller comprising several portions of different diameters. These rollers are mounted in bearings or each of the two adjacent rollers at the intermediate bearing. While the photograph is obscure in this re-

(Deposition of Arthur P. Knight.)

spect, it appears that there is some adjusting means below the rollers, but it is not sufficiently definite to state what this adjusting means is for.

XQ. 45. Are the rollers carried in brackets?

A. The rollers are certainly mounted in bearings and these bearings could be termed brackets.

XQ. 46. Does the photograph disclose means for adjusting those brackets transversely of the machine?

A. If I were guessing, I would guess that they did, but I could not swear to it.

XQ. 47. Does the photograph disclose a series of end to end rollers? A. It does. [149]

XQ. 48. There is a series of three rolls illustrated by this photograph? A. Yes, sir.

XQ. 49. And are those rolls arranged end to end in the same manner as the rolls are arranged end to end in the patent in suit? By which I mean there exists no nonavailable space between the ends of the adjacent rollers.

A. In that one respect the rolls are arranged in the same manner.

Mr. ACKER.—I will ask the reporter to mark the photograph for identification, “Defendant’s Exhibit Knight Cross-examination.”

Mr. LYON.—We object to the marking of the photograph in so far as the same contains writing thereon. The principal objection is to the endorsements or memorandum made by some unknown person on this photograph.

Mr. ACKER.—We ask that the photograph as it

(Deposition of Arthur P. Knight.)

exists be marked for identification, and if it should be disclosed during the examination that the words on the back thereof are improper, another photograph identical with this one will be substituted therefor and without any writing on the back thereof.

XQ. 50. Did you ever examine or inspect a machine constructed with the rolls arranged in the manner disclosed by this photograph, Mr. Knight?

A. You mean substantially in the manner shown in that photograph?

XQ. 51. Yes, sir. [150]

A. No, sir, I have not.

XQ. 52. Of course I do not mean this identical machine. A. No, sir.

XQ. 53. That type of machine? A. Yes, sir.

XQ. 54. You state you did not see one exactly the same as the machine illustrated in this photograph. What kind did you examine that approached in any manner the machine illustrated by this photograph, other than the machine of the patent in suit or used by the defendants herein.

A. Only the Ish and other machines which were introduced in that suit to which you refer.

XQ. 55. By the Ish you mean the solid roll?

A. Yes.

XQ. 56. In the Ish machine which you examined was there any transverse adjustment provided for the grading rolls?

A. My recollection does not serve me on that.

XQ. 57. How long ago did you examine the ma-

(Deposition of Arthur P. Knight.)

chine, Mr. Knight?

A. It must have been either last fall, last September, or a year ago last November or December that I saw it. I only have a recollection that I did see the Ish machine, but it was pointed out as a matter of curiosity and I had no special interest in it at the time.

XQ. 58. Is it not a fact that the fruit run-way of the machine covered by the patent in suit is formed entirely [151] of a longitudinally movable member and an opposing rotatable member?

A. No, sir; I can't assent to calling the rotatable member a single member, inasmuch as they are independent in rotation at least independently driven and are independently adjustable.

XQ. 59. I will amend my question. Is it not a fact that the fruit run-way of the machine covered by the patent in suit comprises a longitudinally movable member and an opposing member consisting of a series of end to end revolving rollers, there being no appreciable nonavailable space existing between the ends of adjacent rollers?

A. In the machine shown in the patent and the machine as actually constructed as I have seen it, this is true, but I would not say that in the machine covered by the patent that this is necessarily true, as it has no bearing upon the fundamental principle or the essential element of this patent.

XQ. 60. You understand these fruit graders are designed and adapted for the separation of ten grades of fruit or are you sufficiently conversant

(Deposition of Arthur P. Knight.)

with the grading art in practical operation to answer the question?

A. The machines that I have seen appear to be so adapted, and I have been so informed, but I have no sufficient intimate connection with the art to be an authority on that.

XQ. 61. Can you state from the disclosures of the patent in suit in what manner one of the grading rollers can [152] be blocked out and the integrity of ten separate grades of fruit maintained in the grading operation of the machine as independent and separate grades?

A. Only by adding another grading element at the end, I should say.

XQ. 62. That would be a mere substitution of one grading element for the other which you have cut out, would it not? A. Quite so.

XQ. 63. And if that arrangement was followed you would then have in the machine eleven grading elements? A. Quite so.

XQ. 64. And you would also have to add an independent bin to the other bins on the machine if you had another grading roller?

A. Either that or else provide for the adjustment of the walls of the bins or shove the walls of the bins along.

XQ. 65. Do you find any such adjustment disclosed or referred to or made mention of in the patent in suit? A. No.

XQ. 66. What do you believe to have been the purpose of the inventor of the patent in suit in the

(Deposition of Arthur P. Knight.)

placing of the rollers constituting one member of the grading run-way end to end?

A. They were placed end to end, that is to say, with one end of one roller opposed to the end of the next roller so as to conform to the general longitudinal direction of the run-way. [153]

XQ. 67. Do you find any illustration or disclosure in the patent in suit that the rolls shall be arranged other than that the ends of adjacent rolls shall be approximately abutting, that is, so as to leave no nonavailable space between the same?

A. I do not find either in the drawing or specifications any statement that the rollers abut. The drawing shows the rollers in proximity but the specifications are silent on that point.

XQ. 68. My question, Mr. Knight, did not ask whether you found any statement that the rollers abut, and I will ask the stenographer to repeat the question.

The last preceding question was read by the reporter.

Mr. LYON.—The question is objected to as indefinite, uncertain and unintelligible, and that it does not appear therefrom what counsel means by the term “nonavailable space.”

Mr. ACKER.—I thank counsel very much for the comments placed on the record, but suggest to the Court that the witness has not expressed himself as not being able to understand the question.

Mr. LYON.—The objection is made for the purpose of drawing the attention of the Court to the

(Deposition of Arthur P. Knight.)

fact that the language is susceptible of more than one interpretation, and it is only fair both to the Court and to witness that the uncertainty or ambiguity of the so-called nonavailable space or what it is should be defined by counsel in his interrogation of the witness.

Mr. ACKER.—Counsel will state that the matter of the [154] available or nonavailable space was gone into in the examination of the witness Stebler, and that this witness was present in the examination-room during the entire examination and no doubt by this time is entirely familiar with what is meant.

Mr. LYON.—The further objection is made that it is not cross-examination. The cross-examination should be based on the testimony of this witness and not on the examination of another witness.

Mr. ACKER.—And additionally that the expression has been used by this witness.

A. The patent does not say anything about that one way or the other.

XQ. 69. Is it not a fact from the disclosure of the patent in suit and from your observation of the machines in practical operation that the fruit passes through the grading run-way and as it leaves the lower end of one roller enters almost immediately onto the upper end of the adjacent roller or the next roller of the series?

A. Yes, but it was recognized by the patentee that this adjacent roll might be an idle roll; he says that two rolls might be adjusted to the same grade.

(Deposition of Arthur P. Knight.)

XQ. 70. Even if two rolls are adjusted to the same grade, the fruit passing the foremost roll would enter onto the upper end of the succeeding or adjacent roll.

A. Yes; but in that case this succeeding roll would not be operative to size the fruit but would be an idle roll. [155]

XQ. 70. My question is whether the fruit passing from one roll would not immediately enter upon the forward end of the adjacent roller? A. It would.

XQ. 71. How are the series of end to end rolls constituting the revolving member of the fruit run-way of the Strain patent in suit disposed relative to the movable member of the run-way?

A. They are disposed in spaced relation to the longitudinally movable member of the run-way so as to form between these members the grading apertures.

XQ. 72. And are the end to end rollers of the revolving member of the run-way arranged substantially in the same horizontal plane as the axes of the movable member. A. They are so shown.

XQ. 73. How are the end to end rollers of the revolving member of the fruit run-way adjustable toward or from the movable member?

A. The grading rollers "M" are journaled in arms "N," which slide in grooved block "O" and are adjusted by threaded bolts "P" and nuts "S."

XQ. 74. Is the adjustment a vertical or a transverse adjustment?

A. It is transverse with relation to the movement

(Deposition of Arthur P. Knight.)

of the longitudinally movable member.

XQ. 75. And so called for in the specifications of the patent in suit? A. It is.

XQ. 76. What object do you understand to be accomplished [156] by the patent in suit providing means for driving or imparting rotation to the revolving rollers of the movable member?

A. The patent is silent on this point. If I am asked to give a guess, I presume that the inventor was following the lines of the Ish patent in which the same thing exists. That was not what he was driving at.

XQ. 77. You derive no information one way or the other from the reading of the patent in suit?

A. No, sir.

XQ. 78. How do you know, then, such was not what the inventor was driving at, in the expression as used in the preceding answer or two?

A. Because he pays no attention to it in describing the purpose and operation of the machine except in the operation he says that the grade rollers are revolving to keep the fruit from sticking in the runway, thereby avoiding any tendency to crush the most delicate fruit. This same rotating operation existed in the Ish machine.

XQ. 79. I direct your attention to the language of the specifications as contained between the lines sixty and seventy, column two, page 1, and ask you what your understanding of that language is.

A. That in the machine shown in the drawing there are as many bins as there are grade rollers.

(Deposition of Arthur P. Knight.)

XQ. 80. What do you understand by that feature relating to preventing the fruit from being bruised?

A. That refers to the function of the flexible bottom [157] or fabric bottom of the bin.

XQ. 81. Is it your understanding that the part "W" is a part of the bin, or merely an apron located within the bin, which is apparently provided with a solid bottom the apron being interposed to receive the fruit.

A. The apron "W" is not the bottom of the bin, but it forms a surface on which the fruit is received as it passes to the bin.

Q. 82. Is it your understanding that that is the function and purpose of the apron, to prevent bruising the fruit as it flows into the bins?

A. Yes, sir.

XQ. 83. If I understand you correctly, Mr. Knight, your testimony as to the operation and the working and the functions of the grading machines, either of the type involved in the patent in suit or such as may be on the market or may have been used, is derived solely from your knowledge from the reading of the documents and the casual observation you have made thereof, rather than from the standpoint of a mechanic or expert in the line itself?

A. Except that I would not say "casual." I have examined the machine of the type of the patent in suit and several other machines very carefully and made extended observations in that connection.

XQ. 84. Did you have anything to do with the preparation of the application for reissue of patent

(Deposition of Arthur P. Knight.)

involved in this suit? A. No, sir. [158]

XQ. 85. Have you examined the file-wrapper of the Patent Office proceedings on the application which eventuated in the grant or the reissue of the patent in suit?

Mr. LYON.—Objected to as not cross-examination.

A. I have done so, but it was a considerable while ago and I do not recollect the contents.

XQ. 86. You have also examined the application which eventuated in the grant of the original patent number 730,412, granted to Robert Strain June 9, 1903, for improved fruit grader and of which the patent in suit is a reissue?

Mr. LYON.—Objected to as not cross-examination.

A. The same answer applies.

XQ. 87. Have you examined the file-wrapper of the application which eventuated in a grant of letters patent to Rayburn, which letters patent are set forth and described in the bill of complaint herein on file, which sets forth that an interference was declared between the patent and the application which eventuated in the grant of the reissue of the patent in suit?

Mr. LYON.—Objected to as not cross-examination.

A. I do not recall having seen the file-wrapper or contents of that application.

XQ. 88. Have you ever, in the course of your experience as a patent attorney, prosecuted any appli-

(Deposition of Arthur P. Knight.)

question for United States letters patent on fruit-grading machines?

A. Several, although I don't recall the names at the present moment. [159]

XQ. 89. In recent or early years?

A. Not within the last year and a half.

Mr. ACKER.—That is all, Mr. Lyon.

Redirect Examination.

(By Mr. LYON.)

RDQ. 1. Mr. Knight, on cross-examination your attention has been directed to the Ish patent number 458,422. State whether or not it is possible with the device of this patent to secure the independent, individual adjustment of each grade of fruit.

A. It is not.

RDQ. 2. With regard to the device as shown in the photograph, which was shown you, and marked for identification, "Defendant's Exhibit Knight Cross-examination," is it possible with this machine to secure an independent, individual adjustment of the grades?

Mr. ACKER.—That is objected to on the ground that the witness has previously testified that he is unable to tell from the photograph the operation of the machine or the operative parts contained therein, and I submit that if he was not able to do so on cross-examination, he is no better qualified to do so on redirect.

A. It is not.

RDQ. 3. Are you able from this photograph to answer this question positively?

(Deposition of Arthur P. Knight.)

A. While one from this photograph would have to guess at what is not shown and therefore could not swear as to what the actual operation would be, yet I can swear that with the construction of rollers in which each roller comprises a plurality of steps of different [160] diameters in rigid relation that it would not be possible, no matter what the construction of the hidden parts would be, to provide for the individual or independent adjustment of the different sizes as determined by the different steps of each roller.

Mr. LYON.—That is all.

Mr. ACKER.—That is all.

ARTHUR P. KNIGHT.

**[Deposition of Fred Stebler, for Complainant
(Recalled).]**

FRED STEBLER, a witness produced on behalf of complainant, being recalled for further direct examination, testified as follows:

Direct Examination.

(By Mr. LYON.)

Q. 1. In your testimony yesterday, Mr. Stebler, you were asked certain questions in regard to when the H. K. Miller Manufacturing Company commenced the manufacture of graders, and particularly graders like the patent in suit, or substantially like it. Can you now approximately fix the date on which said company commenced said manufacture?

A. Upon thinking of this matter more carefully, I remember distinctly that Mr. Austin A. Gamble became associated with me in the year 1902, in the month of October, and it was subsequent to this that

(Deposition of Fred Stebler.)

the H. K. Miller Manufacturing Company made these machines, I think in the next year.

Q. 2. When did you first have any knowledge of their making any such machines? [161]

A. That I cannot answer definitely.

Mr. LYON.—That is all.

Cross-examination.

(By Mr. ACKER.)

XQ. 1. In your examination of yesterday, Mr. Stebler, you stated that California sizers, what is known as California sizers, had been placed on the market where the revolving member of the grading run-way consisted of two-stepped rollers, and that the inner ends of the rolls were journaled one to the other; is that correct? A. I think so.

XQ. 2. What was the length of that revolving member of the run-way when so constructed?

A. It was less than eight feet.

XQ. 3. And were any means employed to support the inner adjacent ends of the rolls?

A. Yes, sir.

XQ. 4. What were those means?

A. The bearings or journals.

XQ. 5. That is the supporting bracket?

A. You might call it a supporting bracket.

XQ. 6. Was that supporting bracket adjustable transversely relative to the opposing movable member? A. It was.

XQ. 7. Were the outer ends of the rolls mounted in brackets as well as the inner ends?

A. They were mounted in bearings which you

(Deposition of Fred Stebler.)

might also call brackets, I presume.

XQ. 8. Were they adjustable?

A. Yes, sir. [162]

XQ. 9. Were all the bearings transversely adjustable, so as to give a transverse adjustment to the rolls, relative to the movable member of the run-way? A. I think so.

XQ. 10. And those grading rolls were arranged end to end?

A. The sections of the rolls of the grader itself were arranged end to end, of course.

XQ. 11. When you say "sections" you mean the sections of the revolving member of the run-way?

A. When I say "sections," I mean the sections of which the rotating member was constructed.

XQ. 12. And I understand you to state that there were two independent rollers?

A. No, sir; I did not state so.

XQ. 13. Do I understand you to state that the revolving member of the run-way consisted of two sections, two rotatable sections?

A. That may be correct.

XQ. 14. Is it correct? A. I am not sure.

XQ. 15. Please be a little positive about it or draw on your memory to such an extent as to be positive. I believe you testified that you manufactured the device.

A. I decline to state positively something I am not sure of.

XQ. 16. You are not able to state the character of the device you manufactured yourself and placed on

(Deposition of Fred Stebler.)

the market? [163] A. Yes, sir.

XQ. 17. Why is it that you are unable to state as to a matter that you manufactured and placed on the market yourself and you can so readily testify as to that matter in reply to questions asked by your counsel?

A. Because your questions are not in conformity with those machines nor are they definite.

XQ. 18. In what way is it not definite?

A. Because I can't understand lots of times what you really mean.

XQ. 19. Take, for example, a revolving member of the character illustrated in the photograph, "Defendant's Exhibit Knight Cross-examination." Could you state how those roll members are mounted?

A. I can.

XQ. 20. How are they mounted?

A. They are mounted in journals.

XQ. 21. Are they mounted in journals at each end? A. I presume they are.

XQ. 22. Are the journals adjustable?

A. I presume they are.

XQ. 23. Can you state more definitely that they are? A. Not from this photograph.

XQ. 24. Can you state from any knowledge of the machine that you have?

A. I have made this machine and made them adjustable.

XQ. 25. Transversely adjustable?

A. Yes, sir.

(Deposition of Fred Stebler.)

XQ. 26. When did you first make these machines?
[164]

A. I think probably in the year 1902.

XQ. 27. Make any of them prior to that?

A. No, sir.

XQ. 28. Do you know of any machines of this character having been in use prior to the year 1902?

A. Yes, sir.

XQ. 29. When and where.

A. Well, I don't say there were a great many in use. They were in use in almost every packing-house in California.

XQ. 30. How early.

A. I found them in use when I came here.

XQ. 31. That was in 1899 I believe you testified?

A. That was in 1899.

Mr. ACKER.—That is all, Mr. Lyon.

Redirect Examination.

(By Mr. LYON.)

RDQ. 1. Mr. Stebler, in relation to the possibility of adjustment of the grades of the machine like that shown in Defendant's Exhibit Knight Cross-examination photograph, and which you state you have manufactured, can you explain to us how the grades were adjusted in that machine?

A. The grades were adjusted by adjusting the rotating member.

RDQ. 2. And how many grades would be adjusted by adjusting the rotating member?

A. Well, in this photograph, from which it might appear that the rotating member is in three sections

(Deposition of Fred Stebler.)

and any [165] one section containing not less than two grades, you could not, of course, under any circumstances, by adjusting this rotating member, alter one grade without affecting the other, that is to say, these sections of this rotating member, being of a reduced diameter at one end for the purpose of making a wider aperture at one end than the other, which necessarily means that in this wider aperture another grade of fruit would be obtained. It is obvious that since by adjusting this section as a whole, which would necessarily have to be done, that any adjustment of one grade on this section must necessarily affect the other grade which is also made on this section.

RDQ. 3. How, then, would you, in the machine of this construction and interrelation of parts, secure an independent, individual adjustment of each grade?

A. I can't see that it is possible in this machine.

RDQ. 4. Was it possible in the other machines embodying a somewhat similar construction, and which you say your firm manufactured, to secure the individual, independent adjustment of each grade?

A. No more so than is in the machine shown in this photograph.

RDQ. 5. Do you know whether there are many of the machines of the general type of this photograph now in use? A. No, there are very few.

RDQ. 6. What has become of them?

A. They have been discarded, taken out, and larger [166] machines substituted.

(Deposition of Fred Stebler.)

RDQ. 7. What kind of machines have been substituted?

A. Almost invariably machines containing the improvements covered by the patent in suit.

RDQ. 8. What improvement do you refer to?

A. The improvement I particularly refer to is the feasibility of being able to adjust any one grade of fruit made on this machine absolutely independent of any other.

Mr. LYON.—That is all.

Recross-examination.

(By Mr. ACKER.)

RXQ. 1. In the machine as illustrated by the photograph, which has been marked for identification Defendant's Exhibit Knight Cross-examination, was there a movable member in the fruit run-way opposing the rotatable roll member?

A. I could not so state from this photograph.

RXQ. 2. I asked you from the machine that is illustrated by this photograph?

A. I will have to give you the same answer.

RXQ. 3. Have you any idea as to how machines of that character were constructed and operated?

A. Some of them were operated by gravity, that is, the fruit rolled down on them.

RXQ. 4. Did any of them have a fruit run-way, one member of which was a movable member, as, for instance, a rope or belt?

A. The California or Ish grader did.

RXQ. 5. Can you state whether any of these machines had [167] the rope or belt member of the

(Deposition of Fred Stebler.)

run-way coacting with an opposing member constructed as illustrated in the photograph?

A. I would have to take somewhat of a chance on that because the photograph is not altogether clear as to that as to what it would show.

RXQ. 6. How is it, Mr. Stebler, that you can answer so readily the questions of your counsel as to the operation of the machine as illustrated by the photograph marked for identification and you are unable to answer my questions?

A. Because you do not seem to make the questions clear?

RXQ. 7. That is, because you can't answer them?

A. I can't answer an indefinite question intelligently.

RXQ. 8. How is it that you can intelligently answer in reply to your counsel's questions as to the construction of that device and now tell me that you cannot answer because it does not show all parts of the device?

Mr. LYON.—The question is objected to as not constituting a correct statement of the testimony of the witness.

A. Because Mr. Lyon does not make it necessary for me to judge absolutely by the photograph.

RXQ. 9. Then, when you replied to Mr. Lyon's questions you were not answering in accordance with the disclosures of this photograph; is that correct?

A. Not altogether.

RXQ. 10. You judged partly from the photograph and partly from a knowledge of the machines?

(Deposition of Fred Stebler.)

[168] A. As imparted in the question.

RXQ. 11. Oh, I see. Does the photograph disclose a series of end to end rollers?

A. No, sir. Not if we are to take the photograph for what it is purported to show, but I wish to be understood, once and for all, that I am not positive as to what this photograph shows.

RXQ. 12. You are unable to read the photograph; is that the idea?

A. I am unable to state absolutely what it is that this photograph shows.

RXQ. 13. Then you are unable to state whether that representation is a series of end to end rollers or not? A. I would not say so definitely.

RXQ. 14. What is your idea on the subject?

A. I am inclined to think that the photograph is a photograph of a fruit grader, presumably an Ish or California grader, but I don't think anyone could so state positively from this photograph itself.

RXQ. 15. Possibly we are speaking at cross-purposes. I did not ask whether it shows an Ish or California grader. I asked whether that photograph illustrates a series of end to end rolls?

A. And I say I can't say so definitely.

RXQ. 16. What is your impression from that photograph?

A. The impression that I get from the photograph is what I said before, that it is a photograph of the California or Ish grader in which there is a rotatable member as part of the grade-way made up of sections. [169]

(Deposition of Fred Stebler.)

RXQ. 17. Each section is a roll, is it not?

A. Each section is a part of the roll; yes.

RXQ. 18. If it was removed from that structure, it would be a roller, would it not?

A. Possibly.

RXQ. 19. What do you think?

A. I am not stating definitely what it is, for the reason, as I have told you before, that no man living could swear from that photograph what it was.

RXQ. 20. You had no difficulty in testifying from other photographs, had you, Mr. Stebler?

A. What other photographs have I testified to?

RXQ. 21. The four that were introduced in evidence.

A. I think in that case I knew what they were because I helped make them.

RXQ. 22. Then, if I understand you correctly, as a skilled mechanic and as one connected with reading of drawings and proofs of mechanical structures, you are unable to state from a photograph what is illustrated where that thing is apparent on the face of the photograph?

A. I desire to state that photographs cannot always be taken for what they look like; in other words, if a man has no knowledge of the object shown in the photograph, other than what the photograph itself shows, he cannot always at least positively state what the photograph shows and be sure of it.

RXQ. 23. Then the photograph conveys to your mind no mental picture of the apparatus which it illustrates; is [170] that correct?

(Deposition of Fred Stebler.)

A. No, sir; that is not correct.

RXQ. 24. Well, does it?

A. I can't answer that question. It doesn't convey any meaning to me.

RXQ. 25. Do you believe that the same explanation as to the difficulty of testifying from a photograph would apply with equal force to any other mechanic examining a photograph which he has not taken of a machine? A. Yes, sir.

RXQ. 26. Do you believe that the same uncertainty which apparently prevails with you would apply with equal force to Mr. Knight, for instance, when he was testifying from photographs, it not having been shown that he was present when these photographs were taken?

A. I don't think Mr. Knight stated positively what that photograph shows.

RXQ. 27. Then you disagree with Mr. Knight's testimony? A. I don't say so.

RXQ. 28. I asked you if you did, not whether you did say so.

A. No, sir, I don't pretend to disagree with it.

Mr. ACKER.—That it all.

Re-redirect Examination.

(By Mr. LYON.)

RRDQ. 1. It is apparent, is it not, from this photograph before you, marked for identification Defendant's [171] Exhibit Knight Cross-examination, that there appears in the photograph a representation of three sections or portions of a roller supported by some mechanical device, each section

(Deposition of Fred Stebler.)

containing a plurality of stepped portions?

Mr. ACKER.—The question is objected to as leading in the extreme, and especially so in view of the fact that the witness has testified repeatedly that he is unable to state what was disclosed by that photograph.

Mr. LYON.—Answer the question.

A. It is apparent, yes; it might be so taken.

RRDQ. 2. In answering my questions in regard to this photograph, you understood them to refer solely to the photograph of one of the machines which you had constructed, in which sections of stepped rolls were placed as a part of the run-way?

Mr. ACKER.—Same objection.

A. Yes, sir.

RRDQ. 3. You don't answer my question. Read the question.

Question read by reporter.

Mr. ACKER.—I object to the question on the further ground that on cross-examination this witness could not remember or describe the machine that he himself had made and placed on the market and the freeness with which he is now able to answer his own counsel's questions, and the reluctance to answer the questions of counsel for defendants is only too apparent from the face of the record. [172]

Mr. LYON.—We object to counsel's statement on the ground that it is not in accordance with the testimony of the witness or the record of his testimony.

Mr. ACKER.—I submit that the record is the best evidence on that point.

(Deposition of Fred Stebler.)

RRDQ. 4. In order, Mr. Stebler, that you may understand the question entirely, I will reframe it in this manner. When you were testifying as to the fact that the graders which you and your firm put out contained not simply one continuous stepped roller in an integral form, but also put out such graders where one stepped roller was formed of sections and each section comprised a plurality of steps. Was or was there not the possibility of individual adjustment of the graders?

A. There was not.

RRDQ. 5. Now, in this photograph, marked for identification Defendant's Exhibit Knight Cross-examination, it shows three sections of a stepped roller, each section of the roller containing two or more steps. Can you state whether or not it would be possible to secure individual and independent adjustment of each grade, assuming that the other side of the run-way was composed of a traveling rope or belt?

Mr. ACKER.—The question is objected to as leading, and further, in view of the inability of this witness to answer questions on cross-examination.

A. It would not be possible to secure an individual or [173] independent adjustment.

Mr. LYON.—That is all.

Re-recross-examination.

(By Mr. ACKER.)

RRCQ. 1. Mr. Stebler, examine Ish Patent Number 458,422, of August 25th, 1901, and state whether or not that discloses a grading roller?

(Deposition of Fred Stebler.)

A. Yes, that discloses a grading roller. In answering that question, of course, I am familiar with this patent, but I would say in reading this drawing to gain that information, I would not depend on the drawing alone but I would refer to the specifications.

RRCQ. 2. If I place another roll of the same construction and identical with that roll at one end thereof, would I not have two rolls end to end?

A. Yes, sir.

RRCQ. 3. If I put a third roll on the end of the second roll, would I not have three rolls end to end?

A. Yes, sir. Well, in answering that question, that might be construed in different ways, for the reason that you would not have three rolls end to end at any particular point.

RRCQ. 4. I would have three rolls end to end in the area covered by the length of the three, would I not?

A. Well, they would be end to end to each other, but you could take these rolls, I think, in order to conform to your language and place them in a triangle, that [174] is, their axes in a triangle to each other, and still be end to end.

RRCQ. 5. Suppose they were placed in longitudinal alignment, would they still be end to end?

A. Yes, sir.

RRCQ. 6. Why is not the first section disclosed by this photograph introduced for exhibit a roll?

A. How are you to know from that photograph that it is a roll?

RRCQ. 7. You refuse to recognize that this is a

(Deposition of Fred Stebler.)

roll? A. I refuse to swear.

RRCQ. 8. What do you mean?

A. I might take it as a roll. I would not swear it is.

RRCQ. 9. With that understanding do you believe that it is a roll?

A. With that limitation, yes.

RRCQ. 10. Is the second one another roll placed end to end to the first roll? A. Possibly.

RRCQ. 11. Is the last one a third roll placed end to end to the second roll? A. Possibly.

RRCQ. 12. What do you think from your knowledge of the fruit-grading business and from your understanding and reading of proofs of fruit graders, if you understand the expression?

A. My impression would be that assuming that we understand the photograph correctly, I would say that is a [175] roller in three sections.

RRCQ. 13. Why do you say that it is one roller in three sections instead of saying that it is three rollers end to end?

A. Because it is not three rollers end to end, strictly speaking.

RRCQ. 14. Why not?

A. Because it is practically one uninterrupted roller because one section is attached to the other.

RRCQ. 15. There is flexible connection between the roller, is there not? A. Not necessarily.

RRCQ. 16. I understand that it is possible, that it may be a rigid connection, and ask from your

(Deposition of Fred Stebler.)

knowledge of the grader?

A. From my knowledge of that particular grader and assuming that that photograph may be a correct representation of it, the connection between the sections of this roller would be flexible only in a sense that they could be thrown out of their true, axial alignment.

RRCQ. 17. One roll may be taken away from grader? A. Yes, sir.

RRCQ. 18. They are not rigidly connected end to end?

A. They are except for the possibility of throwing them out of axial alignment.

RRCQ. 19. Could I give an adjustment to the last roll of the series of end to end rolls, without disturbing [176] the position of the first roll?

A. Possibly.

RRCQ. 20. Can't you advise? What do you think? A. I don't know what you could do.

RRCQ. 21. Could you? A. Possibly.

RRCQ. 22. And could this machine as placed on the market, have its last roll adjusted without disturbing the foremost roller of the series of rollers?

A. Yes, sir, possibly.

RRCQ. 23. I notice you qualify your answer by saying "possibly." Can you make your answer positive, yes or no? A. I could not in that case.

RRCQ. 24. You could not state whether the last roll could be adjusted without varying the first roll?

A. I would answer that in this way, by saying

(Deposition of Fred Stebler.)

that as I understand you to mean, it would be possible to adjust, assuming that there are three sections of the roller, as you are now trying to make appear, it would be possible to adjust one end section without affecting either of the other two sections.

RRCQ. 25. Did you ever see a fruit grader in operation comprising the three sections, or three sections placed end to end, as represented in this photograph? A. I think so.

RRCQ. 26. You have? A. I think so.

RRCQ. 27. Now, in the one that you observed, would an [177] adjustment of the last roll of the series vary the position of the first roll of the series?

A. I don't know that I ever saw one adjusted.

RRCQ. 28. What do you think from your knowledge of this class of machinery and from your general mechanical ability?

A. I would say that it would be possible to adjust the one end section without affecting the other two, that is, if you adjust it only at one end.

RRCQ. 29. Of course, you appreciate the fact that your testimony and the testimony that you are giving is for the purpose of enabling the Court to clearly understand this matter and not so much on my own account. I am pretty well convinced myself, and I must say that your answers appear to be somewhat evasive and a decided reluctance to answer questions is apparent. In what manner, if these three rollers are placed end to end by a flexible connection between them, would you adjust the last roll of the series to

(Deposition of Fred Stebler.)

vary the position of the first roll of the series?

A. That depends on how you adjusted the last roll of the series.

Mr. ACKER.—That is all.

Mr. LYON.—That is all.

FRED STEBLER.

Mr. LYON.—Complainant offers in evidence certified copies of the file-wrapper and contents of the application upon which original letters patent number 732,411, [178] dated June 11th, 1903, were granted and issued to Stebler and Gamble for the invention of Robert Strain in fruit graders, and asks that the same be marked "Complainant's Exhibit Original File-wrapper."

Complainant also offers in evidence certified copies of the file-wrapper and contents of the application of Robert Strain for a reissue of said letters patent, and asks that the same be marked "Complainant's Exhibit Reissue File-wrapper."

It is stipulated and agreed that of all depositions and proofs in this case, a copy shall be made for counsel for each party and the expense of making the same shall be taxed as costs of the suit.

It is stipulated that the testimony may be taken by either party before a notary public, duly qualified to administer oaths and take depositions, and that the testimony may be transcribed by the notary in person or by some competent party authorized and acting under him.

It is stipulated and agreed that all exhibits offered

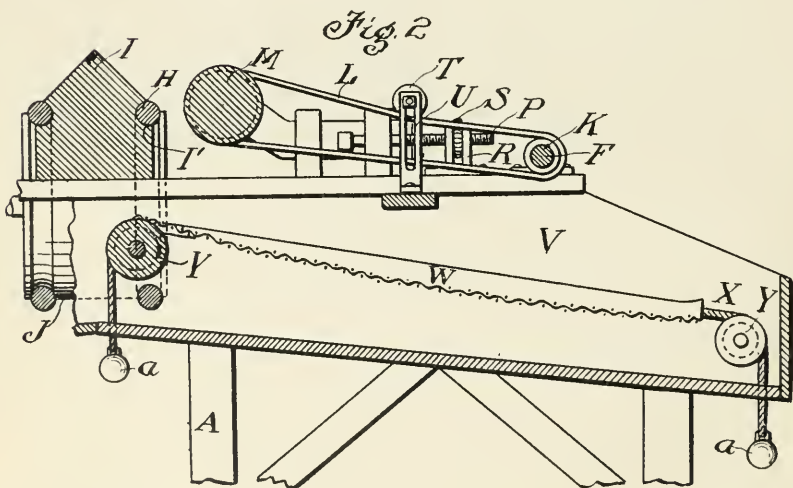
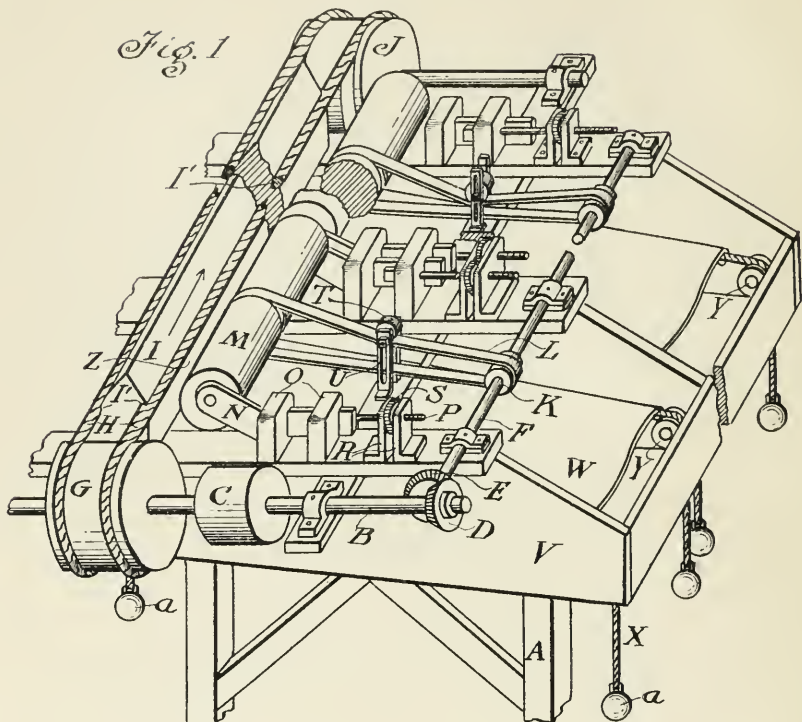
in evidence during the taking of depositions or proofs in this case shall be retained in the custody of counsel offering the same and be filed upon the conclusion of the taking of testimony herein, and shall be produced at the subsequent taking of depositions on behalf of either party upon notice. [179]

* * * * *

[Complainant's Exhibit "Patent in Suit."]

R. STRAIN.
FRUIT GRADER.

APPLICATION FILED OCT. 21, 1903.



Witnesses:

W. W. Wainwright

Fredrick Shyon

Inventor:

Robert Strain

*by Townsend Bros
Attys.*

UNITED STATES PATENT OFFICE.

ROBERT STRAIN, OF FULLERTON, CALIFORNIA, ASSIGNOR TO FRED STEBLER AND AUSTIN A. GAMBLE, OF RIVERSIDE, CALIFORNIA.

FRUIT-GRADER.

SPECIFICATION forming part of Reissued Letters Patent No. 12,297, dated December 27, 1904.

Original No. 730,412, dated June 9, 1903. Application for reissue filed October 21, 1903. Serial No. 177,990.

To all whom it may concern:

Be it known that I, ROBERT STRAIN, a citizen of the United States, residing at Fullerton, in the county of Orange and State of California, have invented new and useful Improvements in Graders, of which the following is a specification.

My invention relates to that class of graders designed to assort fruits, vegetables, such as potatoes, and nuts into lots of different sizes; and the objects thereof are to provide a machine for that purpose which is adjustable to a number of grades and which will prevent the fruit from bruising or being crushed. I accomplish these objects by the machine described herein and illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a fragment of my machine arranged for grading oranges or lemons. Fig. 2 is a cross-section.

In the drawings my machine is designed as a double grader—that is, two graders arranged side by side on the same frame, one side being a duplicate of the other side.

A represents the frame of the machine, on the top of which at one end of the machine, preferably at the upper end, is transversely mounted the driving-shaft B, carrying the driving-pulley C, by means of which motion is imparted thereto. When arranged as a double grader, on each end of the driving-shaft is rigidly mounted driving bevel-gears D, which mesh with driven bevel-gears E, rigidly mounted on the longitudinally-extending driven shafts F. On the driving-shaft is rigidly mounted the rope-driving drum G, which imparts motion to ropes H, which travel in the direction indicated by the arrow in Fig. 1—that is, from head to the foot thereof—in grooves I' in guide I, which forms one side of the fruit-runway. These ropes pass over pulley J at the lower end of the machine. On the driven shafts F are rigidly mounted a number of driving-pulleys K, which drive belts L, that pass around the grading-rollers M, which are revolubly mounted in adjusting-arms N, which have a longitudinal movement in guide-blocks O, affixed to the top of the frame. To each of these adjusting-arms

is affixed a threaded bolt P, which passes through two stop-blocks R, between which is an adjusting-nut S on bolt P in threaded contact therewith, by the rotation of which the grade-rollers are moved toward or from the guide. Affixed to the top of the frame are band-tighteners to tighten the bands when the grade-rollers are moved away from the guide. These band-tighteners are formed of a pulley T, adjustably mounted in slotted uprights U, affixed to the frame. Below the grade-rollers are as many bins V as there are grade-rollers, which are adapted to hold the fruit which will pass between the grade-roller and the guide. In order to prevent the fruit from being bruised, in each bin is mounted an apron W, of strong cloth, the inner end of which is higher than the outer, so that the fruit will roll to the outer end of the bin, where it has but a short distance to fall to reach the bottom of the bin. Each edge of these aprons is fastened to a rope X, which passes over small pulleys Y, affixed to the side of the bin, and each end thereof has a weight *w* to hold the apron taut and to keep it in position. In the operation of my machine the first roller, or that nearest to the shaft B, is adjusted so as to permit the smallest grade of fruit to pass between the roller and the guide. The next roller is adjusted for the next larger grade, and so on for each successive grade. In orange-grading there are usually nine grades. Motion is imparted to the driving-shaft to cause a rope H to travel in a groove I' in guide I in the direction indicated by the arrow. This causes the grade-rollers to revolve so that the top of the roller travels away from the guide. The fruit is fed into the runway between the guide and the grade-rollers by any suitable device (not shown) in the usual manner.

It will be observed that as the grade-rollers are adjustable the distance between the roller and guide can be made small or large to adapt the machine to grading small nuts or fruits or large nuts or large fruits. It will also be observed that the ropes carry the fruit toward the lower end of the machine and at the same time the grade-rollers are revolving, so as to

keep the fruit from sticking in the runway, thereby avoiding any tendency to crush the most delicate fruit. It will also be observed that the inner end of the apron gives a soft yielding surface for the fruit to fall upon a short distance below the roller, thus preventing any danger of its bruising. As the fruit rolls to the outer end of the apron it falls onto the bottom of the bin, and as the end fills up the apron can be moved toward the inner end of the bin, the weights providing for such adjustment. The fruit is packed from the outer end of the bin. By having short grade-rollers separately adjustable very fine grading may be done and more than one roller may be adjusted to the same grade, if desired. If there should be a large quantity of the fruit of a single grade intermixed with a small quantity of fruit of different grades, this feature is very desirable, as a number of bins may be filled with fruit of the same grade.

Having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a fruit-grader, in combination a plurality of independent transversely-adjustable rotating rollers; a non-movable grooved guide lying parallel with the plane which passes vertically and longitudinally through the center of said rollers, said rollers and guide forming a fruit-runway; a rope in the groove in said guide and means to move said rope.

2. In a fruit-grader having a bin means to break the fall of the fruit from the grading-way comprising a yielding soft apron above the bottom of the bin and extending under the grading-way, said apron having the end thereof under the grading-way at a higher elevation than the other end; the lower end extending to near the outer side of the bin.

3. In a fruit-grader, a grooved longitudinal guide; a rope in said groove; means to impart movement to said rope; one or more rollers lying parallel to said guide revolvably mounted in arms transversely adjustable; means to adjust said arms comprising a threaded bolt passing through two stop-blocks; a nut on said bolt in threaded contact therewith between said stop-blocks; and means to revolve each of said rollers comprising a belt passing around said roller and a pulley mounted on a shaft; and means to impart motion to said shaft.

4. In a fruit-sizing machine, a runway for the fruit comprising cooperating parallel members, one of said members consisting of a series of rolls arranged end to end and disposed progressively at different distances from the other member, forming communicating fruit-discharging apertures of progressively-different widths along the length of the runway, means for adjusting each roll independently to vary the size of the aperture formed thereby, and means for driving the rolls, substantially as described.

5. In a fruit-sizing machine, a supporting-

frame, a runway for the fruit comprising cooperating parallel members, one of said members consisting of a series of rolls arranged end to end and disposed progressively at different distances from the other member, forming communicating fruit-discharging apertures of progressively-different widths along the length of the runway, brackets carrying the rolls, means mounted upon the frame for moving each bracket and adjusting each roll independently to vary the size of the aperture formed thereby, and means for driving the rolls, substantially as described.

6. In a fruit-sizing machine, the combination with a supporting-frame, of a fruit-runway formed by a relatively stationary member and a longitudinal series of rolls arranged end to end at different distances from said stationary member, thus providing communicating spaces of progressively-varying sizes for the discharge of the fruit, means for independently adjusting the rolls with relation to said stationary member, means for driving the rolls, and means for positively feeding the fruit along the runway, substantially as set forth.

7. In a fruit-grading machine, the combination with a supporting-frame, of a fruit-runway comprising a relatively stationary member and a series of rolls disposed in parallel relation to said member and arranged end to end at different distances from the stationary member, forming communicating passages of progressively-varying sizes along the runway for the discharge of the fruit, means for adjusting the rolls with relation to the stationary member, means for driving said rolls, and a traveling belt moving in parallel relation to the stationary member and rolls for positively feeding the fruit along the runway, substantially as described.

8. In a fruit-grading machine, the combination with a supporting-frame, of a central longitudinal divider, forming one side of each of two parallel runways, a series of rolls disposed on each side of the divider and arranged end to end at different distances from the divider, forming therewith a runway having progressively-varying discharge-spaces for the fruit, means for adjusting the rolls of each series toward and from the common divider, means for driving the rolls, and belts disposed on opposite sides of the divider for positively feeding the fruit along the runways, substantially as described.

9. In a fruit-sizing machine, the combination with a supporting-frame, of a longitudinal shaft, transverse shafts, one of which is adapted to be driven from a suitable source of power, a runway comprising a relatively stationary member and an adjustable member consisting of a series of rolls arranged parallel therewith and disposed end to end and at different distances from the stationary member, means for independently adjusting the

rolls with relation to the stationary member, means for driving the rolls from the longitudinal shaft, and a belt connected with the transverse shafts for positively feeding the fruit along the runway, substantially as set forth.

10. In a fruit-grading machine, a runway formed of two parallel members, one of said members consisting of a series of end-to-end rolls, brackets carrying the rolls, guides for the brackets, and means for adjusting the

brackets upon the guides, substantially as set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, at Los Angeles, in the county of Los Angeles, State of California, this 14th day of October, 1903.

ROBT. STRAIN.

Witnesses:

FREDERICK S. LYON,
F. M. TOWNSEND.

[Complainant's Exhibit "Original File-Wrapper."]

2-390

UNITED STATES OF AMERICA.
DEPARTMENT OF THE INTERIOR.
UNITED STATES PATENT OFFICE.
TO ALL TO WHOM THESE PRESENTS
SHALL COME, GREETING:

THIS IS TO CERTIFY that the annexed is a true copy from the Records of this Office of the File Wrapper and Contents, in the matter of the

LETTERS PATENT OF ROBERT STRAIN,
Assignor to FRED STEBLER and AUSTIN A.
GAMBLE.

Number 730,412

Granted June 9, 1903,

for

Improvement in Fruit-Graders.

IN TESTIMONY WHEREOF I have hereunto set my hand and caused the seal of the Patent Office to be affixed at the City of Washington, this 2d day of July, in the year of our Lord one thousand nine hundred and twelve and of the Independence of the United States of America the one hundred and thirty-sixth.

[Seal]

E. B. MOORE,
Commissioner of Patents. [199]

170

Fred Stebler vs.

2-437.

NUMBER (SERIES OF 1900). DIV. 25
(EX'R'S BOOK) 74-20.

[In pencil:] 105,116
~~Baker.~~ 1902.
Aiton, Div'n XXV.

~~Assigned.~~

Patent No. 730,412.

Name—Robert Strain,

Assor. to Fred Stebler and Austin A. Gamble, of
Riverside, Cal.

Of Fullerton.

County of

State of California.

Invention—Fruit Graders.

Filed
Division of App., No.
PARTS OF APPLICATION FILED.
Reissued Dec. 27, 1904, #12,296.

ORIGINAL.

RENEWED.

Petition	Apl. 28, 1902.	, 190
Affidavit	“ “ 1902.	, 190
Specification	“ “ 1902.	, 190
Drawing	“ “ 1902.	, 190
Model or Specimen	No Model, 190 .	, 190
First Fee Cash	190 .	, 190
“ “ Cert. \$15.	Apl. 28, 1902.	, 190
Appl. filed Complete	Apl. 28, 1902.	, 190

Examined—Lewis B. Wynne, April 14th,
1903. , 190

Countersigned—J. W. Babson,

For Commissioner. For Commissioner.

[In pencil:] 4-14-1903

Notice of Allowance—April 17, 1903 , 190

Final Fee Cash 190 , 190

2 “ “ Cert. \$20 May 18, 1903 , 190

Patented June 9, , 1903

Associate Attorney

Attorney Hazard & Harpham,

3

Los Angeles,

Calif.

Name Serial Number.
Patent No. Date of Patent. [200]
CERTIFICATE. Serial No. 1/2.
AMOUNT RECEIVED APPLICATION
\$15.00. J. E. H., Filed Apr. 28, 1902.
CHIEF CLERK.

PETITION

And Power of Attorney.

To the Hon. Commissioner of Patents:

Your petitioner Robert Strain whose postoffice address is Fullerton, Cal., a citizen of the United States, residing at ~~Los Angeles~~, Fullerton, in the County of ~~Los Angeles~~, Orange, State of California, prays that letters patent may be granted to him for the improvement in Fruit Graders set forth in the annexed specifications, and he hereby appoints the firm of HAZARD & HARPHAM, whose registered number is 1718, the individual members of which firm are Henry T. Hazard and George E. Harpham, of Los Angeles, California, his attorneys with full power of substitution and revocation to prosecute this application, to make alterations and amendments therein, to receive the patent and to transact all business in the PATENT OFFICE connected therewith.

ROBERT STRAIN.

SPECIFICATION:

TO ALL WHOM IT MAY CONCERN:

Be it known that [201] I, Robert Strain, a citizen of the United States residing at Fullerton in the County of Orange, and State of California, have invented new and useful improvements in Graders of

which the following is a specification:—

My invention relates to that class of graders designed to assort fruits, vegetables, such as potatoes, and nuts into lots of different sizes; and the objects thereof are to provide a machine for that purpose which is adjustable to a number of grades and which will prevent the fruit from bruising or being crushed.

I accomplish these objects by the machine described herein and illustrated in the accompanying drawings, in which:

Fig. 1 is a perspective view of a fragment of my machine arranged for grading oranges or lemons.

Fig. 2 is a cross section.

In the drawings my machine is designed as a double grader, that is two graders arranged side by side on the same frame, one side being a duplicate of the other side. A represents the frame of the machine on the top of which at one end of the machine, preferably at the upper end, is transversely mounted the driving shaft B, carrying the driving pulley C by means of which motion is imparted thereto. When arranged as a double grader, on each end of the driving shaft is rigidly mounted driving bevel gears D, which mesh with driven bevel gears E rigidly mounted on the longitudinally extending driven shafts F. On the driving shaft is rigidly mounted the rope driving drum G, which imparts motion to ropes H, which travel in the direction indicated by the arrow in Fig. 1 that is from head to the foot thereof, in grooves I' in guide I, which forms one side of the fruit run-way.

These ropes pass over pulley J at the lower end

of the machine. On the driven shafts F are rigidly mounted a number of driving pulleys K which drive belts L, that pass around the grading rollers M, which are revolubly mounted in adjusting arms N, which have a longitudinal movement in guide blocks O affixed to [202] the top of the frame. To each of these adjusting arms is affixed a threaded bolt P which passes through two stop blocks R, between which is an adjusting nut S on bolt P in threaded contact therewith, by the rotation of which the grade rollers are moved towards or from the guide. Affixed to the top of the frame are band tighteners to tighten the bands when the grade rollers are moved away from the guide. These band tighteners are formed of a pulley T adjustably mounted in slotted uprights U affixed to the frame. Below the grade rollers are as many bins V as there are grade rollers, which are adapted to hold the fruit which will pass between the grade roller and the guide. In order to prevent the fruit from being bruised, in each bin is mounted an apron W of strong cloth, the inner end of which is higher than the outer so that the fruit will roll to the outer end of the bin where it has but a short distance to fall to reach the bottom of the bin. Each edge of these aprons is fastened to a rope X which passes over small pulleys Y affixed to the side of the bin, and each end thereof has a weight *a* to hold the apron taut and to keep it in position. In the operation of my machine the first roller ^Λ is adjusted so as to permit the smallest grade of fruit to pass between

Apr. 7/03.

or that nearest to the shaft B

the roller and guide. The next roller is adjusted for the next larger grade, and so on for each successive grade. In orange grading there are usually 9 grades. Motion is imparted, to the driving

Apr. 7/03. shaft to cause ^H ~~the top of the rope~~ to travel
 a groove I' in guide I
 in [^] ~~the guides~~ in the direction indicated by
 the arrow. [^] This causes the grade rollers to revolve
 so that the top of the roller travels away from the
 guide. The fruit is fed into the run-
 reference letter Z
 " " " way [^] between the guide and the grade roll-
 ers by any suitable device (not shown) in the usual
 manner.

It will be observed that as the grade rollers are adjustable, the distance between the roller and guide can be made small or large to adapt the machine to grading small nuts or fruits or large nuts or large fruits. It will also be observed that the ropes carry the fruit toward the lower end of the machine and at [203] the same time the grade rollers are revolving so as to keep the fruit from sticking in the run-way thereby avoiding any tendency to crush the most delicate fruit. It will also be observed that the inner end of the apron gives a soft yielding surface for the fruit to fall upon a short distance below the roller, thus preventing any danger of its *brusising*. As the fruit rolls to the outer end of the apron it falls onto the bottom of the bin and as the end fills up the apron can be removed toward the inner end of the bin, the weights providing for such

adjustment. The fruit is packed from the outer end of the bin. By having short grade rollers, separately adjustable, very fine grading may be done, and more than one roller may be adjusted to the same grade if desired. If there should be a large quantity of the fruit of a single grade intermixed with a small quantity of fruit of different grades this feature is very desirable as a number of bins may be filled with fruit of the same grade.

Having described my invention what I claim as new and desire to secure Letters Patent is:—

1. In a fruit grader, one or more transversely adjustable rotating rollers; in combination with a guide lying parallel with the rollers, said guide and rollers forming a fruit runway; and ropes in said guides.

2. In a fruit grader a plurality of independently, transversely adjustable rotating rollers; in combination with a longitudinal guide lying parallel to said rollers, said guide and rollers forming a fruit-runway; a rope in a groove in said guide adapted by the movement thereof to cause the fruit to travel along said runway; a fruit retaining bin below each roller having an apron therein to break the fall of the fruit.

3. In a fruit grader one or more transversely and independently adjustable rotating rollers.

4. In a fruit grader a plurality of independently, transversely adjustable rotating rollers; in combination with a longitudinal guide lying parallel to said rollers, said guide and rollers forming

Sub. A.
Dec. 23

ing a runway for the fruit; a rope in a groove in said guide, adapted by the movement thereof to cause the fruit to travel along the runway; a fruit retaining bin below each roller.

5. In a fruit grader one or more bins below the graders each having a yielding soft apron therein elevated above the bottom of the bin.

3. A. ϕ . In a fruit grader, a grooved longitudinal guide, a rope in said groove; means to impart movement to said rope; one or more rollers lying parallel to said guide revolubly mounted in arms transversely adjustable; means to adjust said arms comprising a threaded belt passing through ^{two} stop blocks; a nut on said bolt in threade. contact therewith between said stop blocks; and means to revolve each of said rollers, comprising a belt passing around said roller and a pulley mounted on a shaft; and means to impart motion to said shaft.

[205]

In witness that I claim the foregoing I have hereunto subscribed my name this — day of March, 1902.

ROBERT STRAIN,
Inventor.

Witnesses:

E. K. BEUCHLEY.
G. E. HARPAM.

OATH.

STATE OF CALIFORNIA,

Orange

COUNTY OF LOS ANGELES,—ss.

Robert Strain, the above named petitioner, being duly sworn, deposes and says that he is a citizen of the United States and resident of Fullerton in the County of Los Angeles, Orange and State of California, and that he verily believes himself to be the original, first and sole inventor of the improve-

ment in Fruit Graders described and claimed in the annexed specification that he does not know and does not believe that the same was ever known or used before his invention or discovery thereof; or patented or described in any printed publication in the United States of America or any foreign country before his invention or discovery thereof, or more than two years prior to this application, or in public use or on sale in the United States for more than two years prior to this application, and that no application for foreign patent has been filed by him or his legal representatives or assigns in any foreign country.

ROBERT STRAIN.

Sworn and subscribed to before me this 19th day of April, 1902.

[Seal]

H. C. HEAD,

Notary Public in and for the County of ~~Los Angeles~~,
Orange, State of California.

[Endorsed:] MAIL ROOM APR. 28, 1902. U.
S. PATENT OFFICE. [206]

2-260.

Paper No. 1.

Div. ——— Room No. 243

Address Only

“The Commissioner of Patents,
Washington, D. C.”

M. E. C.

All communications respecting this application should give the serial number, date of filing, and title of invention.

DEPARTMENT OF THE INTERIOR.
UNITED STATES PATENT OFFICE.

Washington, D. C., July 7, 1902.

MAILED

“ “ “

Robert Strain,

Care Hazard & Harpham,

Los Angeles, Cal.

Please find below a communication from the

EXAMINER in charge of your application #105,116, filed April 28, 1902, for fruit grader.

F. I. ALLEN,

~~F. B. MOORE,~~

Commissioner of Patents.

This action is in response to applicant's communication filed.

This case has been examined.

Claim 1 comprehends an adjustable rotating roller in combination with a guide lying parallel with said roller or rollers, and constituting therewith a fruit run-way. The patent to Ish, 458,422, Aug. 25, 1891, Fruit and Vegetable Separators, shows a single roller made in a series of sections of varying diameter and adapted to act jointly with a guide to constitute a run-way of varying width for the purpose of properly grading fruit, etc., submitted to it. This is the functional equivalent of what applicant sets forth in his claim 1, and said claim is rejected in view of said references, especially since it involves no invention merely to adjust a roller nearer to and farther from a co-acting part. See patent to Hutchins, 456,092, July 14, 1891, Fruit and Vegetable Separators, for adjustment of roller.

Claim 2 is distinguished from the 1st claim by the mere duplication of the adjustable grading rollers, which does not involve invention; then by the carrying rope in the grooves of the guide piece, which is old in view of Hutchins, 456,856, Dec. 29, 1891, Fruit and Vegetable Separators, in which the traveling strips C show the equivalent of applicant's ropes; and lastly, by the apron in the bin to break the fall

of the fruit, the functional equivalent [207] of which is seen in the flexible aprons in the patent to Ellithorpe, 399,509, March 12, 1889, same sub-class. The claim is accordingly rejected.

Claim 3 is rejected on Hutchins, 456,092, cited above.

Claim 4 is rejected on the references cited against claim 2.

Claim 5 is rejected as lacking in invention in view of Ellithorpe, cited above.

Claim 6 appears to be allowable.

H. E. B.

LEWIS B. WYNNE,
Examiner,
Division XXV. [208]

Serial No. 105,116, Paper No. 2.
 Amendment A. (W)
 Filed Dec. 23, 1902. (V)

PATENT OFFICE,
 DEC. 30, 1902.
 DIVISION XXV.

Los Angeles, Cal., Dec. 24th 15th, 1902. /Com

R. Steirn #105,116.

Filed April 28, 1902, Fruit Grader.

U. S. PATENT OFFICE
 DEC 24, 1902.
 (DIVISION 5.) - 7

Commissioner of Patents:

4 Sir:- Examiner's letter of July 7th, 1902,
 considered. We amend the application as follows:

Strike out claims 1 - 2 - 3 - 4 & 5. Insert new claims as follows.

1. In a fruit grader in combination a plurality of independent transversely adjustable rotating rollers; a non-moveable grooved guide lying parallel with the plane which passes vertically and longitudinally through the center of said rollers, said rollers and guide forming a fruit runway; a rope in the groove in said guide and means to move said rope.

2. In a fruit grader a plurality of independently transversely adjustable rotating rollers, said rollers being adapted to form one side of the fruit runway of the grader.

2. β . In a fruit grader having a bin means to break the fall of the fruit from the grading way comprising a yielding soft apron above the bottom of the bin and extending under the grading way, said apron having the end thereof under the grading way at a higher elevation than the other end; the lower end extending to the near the outer side of the bin.

Renumber claim 6 to be 4.

REMARKS.

Examiner cites Ish to show a stepped roller and Hutchins of 1891 to show an adjustment of a roller and Ellithorpe to show a soft bottom for a fruit bin. We desire to call Examiners attention to the following points of difference between applicants device and the references. If you apply Hutchins adjustment to Ish's rollers you do not produce the same effect as can be produced with applicants independently adjustable rollers. In the

A
 Cancelled
 Apr. 7/03

first place Ish's rollers must have the steps thereof arranged with reference to the difference between the grades of the fruit or nuts or other things being graded, and the roller will only grade that particular kind of fruit. If the roller is stepped for grading oranges it will not do for grading nuts. With applicant's machine the independent adjustment of the rollers enables its use for grading oranges or nuts or olives. You can not apply Hutchins adjustment to Ish's rollers and produce the same effect as can be produced with applicant's device. Suppose that a closer adjustment between the grades is desired, with applicant's device each roller can be adjusted to make that difference. With Ish a new roller must be made. Suppose that one of the grades is all right in Ish and a change in the others is desired. One end or the other must be moved, which will throw the edges of the rollers out of line parallel with the other side of the guide and will make a guide way of V-shaped steps.

Claim 3 as amended distinguished from Ellithorpe. In Ellithorpe the canvas forms the bottom of the bin and is practically the same elevation all the distance across the bin. In applicant's device the apron is only used to break the fall of the fruit and does not form the bottom of the bin. For these reasons the amended claims should be allowed.

Yours truly,

HAZARD & HARPHAM,

Attys. for Applicant.

[Endorsed:] MAIL ROOM DEC. 23, 1902. U. S.
PATENT OFFICE. [210]

Div. ——— Room No. 243
 Address only
 "The Commissioner of Patents,
 Washington, D. C."
 M. E. C.

Paper No. 3.
 All communications respecting this
 application should give the serial num-
 ber, date of filing, and title of inven-
 tion.

DEPARTMENT OF THE INTERIOR.
 UNITED STATES PATENT OFFICE.

Washington, D. C., March 12, 1903.

MAILED " " "

Robert Strain,
 Care Hazard & Harpham,
 Los Angeles, Calif.

Please find below a communication from the
 EXAMINER in charge of your application.
 #105,116, filed April 28, 1902, for Fruit Graders.

F. I. ALLEN,

~~E. B. MOORE,~~

Commissioner of Patents.

This case has been considered in view of amend-
 ment and argument filed Dec. 23, 1902.

After "roller," line 19, page 2, insert "or that
 nearest to the shaft B."

The meaning of the matter in line 24, page 2, is
 not clear. It is suggested that said line be erased
 and that the following be inserted in place thereof,
 viz: "shaft to cause a rope H, to travel in a groove
 I in the top of the guide I, in the."

The "runway" (see line 27, page 2) should be let-
 tered both in specification and drawings.

The 2nd claim lacks sufficient elements to form a
 patentable combination. The fixed guide I should
 be positively included as an element. For a further
 illustration of the art see Stevens, 247,428, Sept. 20,

1881, Fruit and Vegetable Cutters, wherein is shown a plurality of independently transversely adjustable parts forming a side of fruit runway of the grader. To substituting a roller for each of said parts or bars would in view of the common use of the rollers hardly constitute invention. Claim 2 is objected to.

A. McNAUGHT,
Act'g Examiner,
Division XXV. [211]

R. A.

Serial No. 105,116. Paper No. 4.
Amendment
Filed Apr. 7, 1903.

PATENT OFFICE.

APR. 7, 1903.

DIVISION XXV.

Los Angeles, Cal., April 1st, 1903.

MAIL ROOM

R. Strain.

APR. 7, 1903.

#105,116.

U. S. PATENT OFFICE.

Filed 4/28/02.

Fruit Grader.

Commissioner of Patents:

Sir: Examiner's letter of 3/12/03 in the above matter considered. We amend the application as follows: After "roller" in line 19 page 2 of the specifications insert or that nearest to the shaft B. On same page in line 24 after "cause" strike out "the top of the rope" and in lieu insert a rope H. In same line strike out "the guides" and in lieu insert a groove I' in guide I. After "runway" in line 27 same page insert "reference letter Z. Strike out

claim. 2. Renumber the other claims. The above amendments puts the case in condition for allowance.

Yours truly,
HAZARD & HARPHAM,
Attys. for Applicant. [212]

Photograph of Blue-print of Drawings of Fruit-grader, Accompanying Serial No. 105,116.

[Endorsed]: 64384. Jun. 25, 1912. T. [213]

[In pencil:] 1 incl.

Los Angeles, Cal., April 1st, 1903.

R. Strain.

#105,116.

Filed 4/28/02.

Fruit Grader.

Commissioner of Patents:

Sir: Examiner's letter of 3/12/03 in the above matter considered. Please send drawing to draughtsman and have the reference letters I' and Z applied to the groove and fruit runway as per blue print enclosed.

Yours truly,
HAZARD & HARPHAM,
Attys. for Applicant.

[Endorsed]:

C

HAZARD & HARPHAM

U. S. PATENT OFFICE LETTER.

NUMBER FILED IN DIV. A.

64384 APR. 7, 1903.

SERIES OF AND RECEIVED.

[In pencil:] Cov—o.

REC'D IN DIV. C.

APR. 8, 1903.

Drwg. corrected and
to Exam. April 10/03.

No charge

FORWARD to mail room

FOR DIV. 25, April 10/03.

Mail Room.

Transfer to Div. 25, 4.11.03. [214]

(HAND) IN REMITTING THE FINAL FEE GIVE THE SERIAL NUMBER AT THE HEAD OF THIS NOTICE.

Fred Stebler vs.

2-181.

Divisions should be addressed to
Commissioner of Patents,
Washington, D. C."

Serial No. 105,116.

DEPARTMENT OF THE INTERIOR.

U. S. PATENT OFFICE.

Washington, D. C., Apr. 17, 1903.

Robert Strain,
c/o Hazard & Harpham,
Los Angeles,
Cal.

Sir:—Your APPLICATION for a patent for an IMPROVEMENT IN FRUIT GRADERS, filed Apr. 28, 1902, has been examined and ALLOWED.

The final fee, TWENTY DOLLARS, must be filed, and the Letters Patent bear date as of a day not later than SIX MONTHS from the time of this present notice of allowance.

If the final fee is not paid within that period the patent will be withheld, and your only relief will be by a renewal of the application, with additional fees, under the provisions of Section 4897, Revised Statutes. The Office aims to deliver patents upon the day of their date, and on which their term begins to run; but to do this properly applicants will be expected to pay their final fees at least TWENTY DAYS prior to the conclusion of the six months allowed them by law. The printing, photolithographing and engrossing of the several patent parts preparatory to final signing and sealing will consume the intervening time, and such work will not be done until after payment of the necessary fees.

(Hand) If payment is made by check or draft, the credit allowed is subject to the collection of the same.

When you send the final fee you will also send, **DISTINCTLY AND PLAINLY WRITTEN**, the name of the **INVENTOR** and **TITLE OF INVENTION AS ABOVE GIVEN**, **DATE OF ALLOWANCE** (which is the date of this circular), **DATE OF FILING**, and, if assigned, the **NAMES OF THE ASSIGNEES**.

If you desire to have the patent issue to **ASSIGNEES**, an [215] assignment containing a **REQUEST** to that effect, together with the **FEE** for recording the same, must be filed in this office on or before the date of payment of final fee.

After issue of the patent uncertified copies of the drawings and specifications may be purchased at the price of 5 cents each. The money should accompany the order. Postage stamps will not be received.

Respectfully,

F. I. ALLEN,

Commissioner of Patents.

(Hand) After allowance, and prior to payment of the final fee, applicants should carefully scrutinize the description to see that their statements and language are correct, as mistakes not incurred through the fault of the office, and not affording legal grounds for reissues, will not be corrected after the delivery of the letters patent to the patentee or his agent.

[216]

R. STRAIN.
FRUIT GRADER.

APPLICATION FILED APR. 28, 1902.

NO MODEL.

Fig. 1.

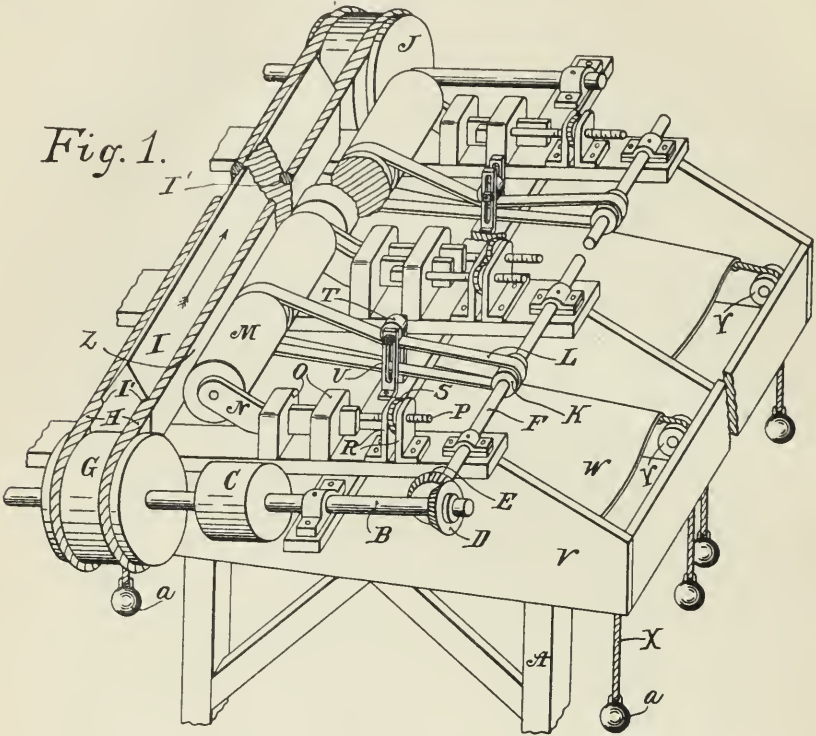
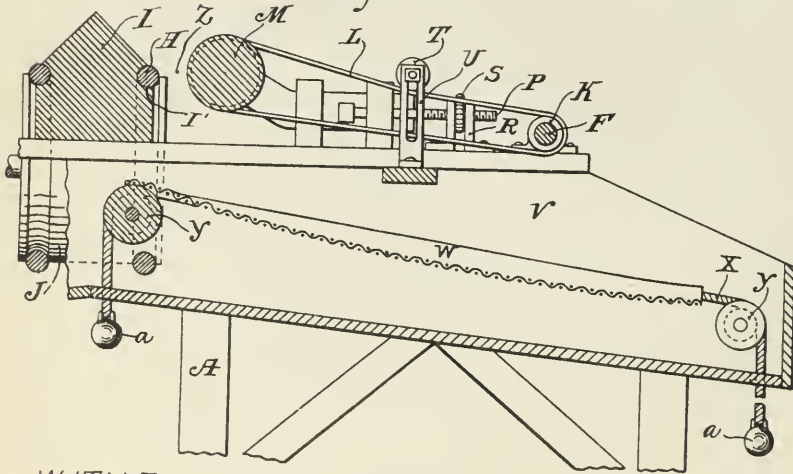


Fig. 2.



WITNESSES

INVENTOR

Chas L. Snyder
Ab. C. Nicholson.

Robert Strain
BY Hazard Chapman
ATTORNEYS.

UNITED STATES PATENT OFFICE.

ROBERT STRAIN, OF FULLERTON, CALIFORNIA, ASSIGNOR TO FRED STEBLER AND AUSTIN A. GAMBLE, OF RIVERSIDE, CALIFORNIA.

FRUIT-GRADER.

SPECIFICATION forming part of Letters Patent No. 730,412, dated June 9, 1903.

Application filed April 28, 1902. Serial No. 105,116. (No model.)

To all whom it may concern:

Be it known that I, ROBERT STRAIN, a citizen of the United States, residing at Fullerton, in the county of Orange and State of California, have invented new and useful Improvements in Graders, of which the following is a specification.

My invention relates to that class of graders designed to assort fruits, vegetables, such as potatoes, and nuts into lots of different sizes; and the objects thereof are to provide a machine for that purpose which is adjustable to a number of grades and which will prevent the fruit from bruising or being crushed. I accomplish these objects by the machine described herein and illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a fragment of my machine arranged for grading oranges or lemons. Fig. 2 is a cross-section.

In the drawings my machine is designed as a double grader—that is, two graders arranged side by side on the same frame, one side being a duplicate of the other side.

A represents the frame of the machine, on the top of which at one end of the machine, preferably at the upper end, is transversely mounted the driving-shaft B, carrying the driving-pulley C, by means of which motion is imparted thereto. When arranged as a double grader, on each end of the driving-shaft is rigidly mounted driving bevel-gears D, which mesh with driven bevel-gears E, rigidly mounted on the longitudinally-extending driven shafts F. On the driving-shaft is rigidly mounted the rope-driving drum G, which imparts motion to ropes H, which travel in the direction indicated by the arrow in Fig. 1—that is, from head to the foot thereof—in grooves I' in guide I, which forms one side of the fruit-runway. These ropes pass over pulley J at the lower end of the machine. On the driven shafts F are rigidly mounted a number of driving-pulleys K, which drive belts L, that pass around the grading-rollers M, which are revolvably mounted in adjusting-arms N, which have a longitudinal movement in guide-blocks O, affixed to the top of the frame. To each of these adjusting-arms is affixed a threaded bolt P,

which passes through two stop-blocks R, between which is an adjusting-nut S on bolt P in threaded contact therewith, by the rotation of which the grade-rollers are moved toward or from the guide. Affixed to the top of the frame are band-tighteners to tighten the bands when the grade-rollers are moved away from the guide. These band-tighteners are formed of a pulley T, adjustably mounted in slotted uprights U, affixed to the frame. Below the grade-rollers are as many bins V as there are grade-rollers, which are adapted to hold the fruit which will pass between the grade-roller and the guide. In order to prevent the fruit from being bruised, in each bin is mounted an apron W, of strong cloth, the inner end of which is higher than the outer, so that the fruit will roll to the outer end of the bin, where it has but a short distance to fall to reach the bottom of the bin. Each edge of these aprons is fastened to a rope X, which passes over small pulleys Y, affixed to the side of the bin, and each end thereof has a weight *a* to hold the apron taut and to keep it in position. In the operation of my machine the first roller, or that nearest to the shaft B, is adjusted so as to permit the smallest grade of fruit to pass between the roller and guide. The next roller is adjusted for the next larger grade, and so on for each successive grade. In orange grading there are usually nine grades. Motion is imparted to the driving-shaft to cause a rope H to travel in a groove I' in guide I in the direction indicated by the arrow. This causes the grade-rollers to revolve, so that the top of the roller travels away from the guide. The fruit is fed into the runway between the guide and the grade-rollers by any suitable device (not shown) in the usual manner.

It will be observed that as the grade-rollers are adjustable the distance between the roller and guide can be made small or large to adapt the machine to grading small nuts or fruits or large nuts or large fruits. It will also be observed that the ropes carry the fruit toward the lower end of the machine and at the same time the grade-rollers are revolving, so as to keep the fruit from sticking in the

runway, thereby avoiding any tendency to crush the most delicate fruit. It will also be observed that the inner end of the apron gives a soft yielding surface for the fruit to fall upon a short distance below the roller, thus preventing any danger of its bruising. As the fruit rolls to the outer end of the apron it falls onto the bottom of the bin, and as the end fills up the apron can be moved toward the inner end of the bin, the weights providing for such adjustment. The fruit is packed from the outer end of the bin. By having short grade-rollers separately adjustable very fine grading may be done, and more than one roller may be adjusted to the same grade, if desired. If there should be a large quantity of the fruit of a single grade intermixed with a small quantity of fruit of different grades, this feature is very desirable, as a number of bins may be filled with fruit of the same grade.

Having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a fruit-grader in combination a plurality of independent transversely-adjustable rotating rollers; a non-movable grooved guide lying parallel with the plane which passes vertically and longitudinally through the center of said rollers, said rollers and guide forming

a fruit-runway; a rope in the groove in said guide and means to move said rope.

2. In a fruit-grader having a bin means to break the fall of the fruit from the grading-way comprising a yielding soft apron above the bottom of the bin and extending under the grading-way, said apron having the end thereof under the grading-way at a higher elevation than the other end; the lower end extending to near the outer side of the bin.

3. In a fruit-grader, a grooved longitudinal guide; a rope in said groove; means to impart movement to said rope; one or more rollers lying parallel to said guide revolvably mounted in arms transversely adjustable; means to adjust said arms comprising a threaded bolt passing through two stop-blocks; a nut on said bolt in threaded contact therewith between said stop-blocks; and means to revolve each of said rollers comprising a belt passing around said roller and a pulley mounted on a shaft; and means to impart motion to said shaft.

In witness that I claim the foregoing I have hereunto subscribed my name.

ROBERT STRAIN.

Witnesses:

E. K. BEUCHLEY,
G. E. HARPAM.

1902.

130 THRASHING.

Fruit and Vegetable Separators.

CONTENTS.

Print

Application papers. O. K.

1. Rejection July 7, 1902.
2. Amendment A. Dec. 23-1902.
3. Rejtd. Mar. 12, 1903.
4. Amendment Apr. 7, 1903.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.
- 11.
- 12.
- 13.
- 14.
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- 16.
- 17.
- 18.
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- 20.
- 21.
- 22.
23. Fruit & Veg. Seprs.

TITLE:

Improvement in Fruit Graders.

[Endorsed]: 125,382/12.

L. H.

ASM. [219]

(Endorsed.) [220]

[Complainant's Exhibit "Reissue File-Wrapper."]

2-390.

UNITED STATES OF AMERICA.

DEPARTMENT OF THE INTERIOR.

UNITED STATES PATENT OFFICE.

To All to Whom These Presents Shall Come, Greeting:

THIS IS TO CERTIFY that the annexed is a true copy from the Records of this Office of the File Wrapper and Contents in the matter of the

REISSUE LETTERS PATENT OF

ROBERT STRAIN,

ASSIGNOR TO FRED STEBLER and AUSTIN

A. GAMBLE,

Number 12,297,

Granted December 27, 1904,
for

Improvement in Fruit Graders.

IN TESTIMONY WHEREOF I have hereunto set my hand and caused the seal of the Patent Office to be affixed at the City of Washington, this 12th day of October, in the year of our Lord one thousand nine hundred and ten and of the Independence of the United States of America the one hundred and thirty-fifth.

[Seal]

C. C. BILLINGS,

First Assistant Commissioner of Patents. [221]

[In pencil:] Lee. DIV. 25.

NUMBER (SERIES OF 1900.) 1903.

177,990. Div'n. XXV.

(Ex'r's Book.) 47-107.

REISSUE NO. 12,297.

Division of Original Patent No. 730412 granted June 9, 1903
 Name—Robert Strain. Assor. to Fred Stebler and
 Austin A. Gamble, both of Riverside, Cal.

Of Fullerton,

County of

State of California,

Invention—Fruit-Graders.

PARTS OF APPLICATION FILED

Petition	Oct. 20	, 1903.
Affidavit	“ “	, 1903.
Specification	“ “	, 1903.
Drawing	“ “	, 1903.
Old Patent	Oct. 20	, 1903.
Abstract of Title	“ 21	, 1903.
Cash \$30	Oct. 20	, 1903.
Cert. Dep.		, 190 .
Appl. filed complete	Oct. 21,	, 1903.

Original Patent No. 730,412, Dated June , 1903

Examined Lewis B. Wynne, Dec. 7th, 1904. , 190 .

Countersigned J. W. Babson,

For Commissioner. For Commissioner.

Notice of allowance Dec. 9, 1904 , 190 .

Reissued December 27 , 1904.

Associate Attorney ~~Frederick S. Lyon~~ Attorney

Townsend Bros.,

194

Fred Stebler vs.

Address # ~~430-433~~ Bradbury Block. Address, 433
Bradbury Block,

Los Angeles,

Cal.

Los Angeles, Cal.

Reissue No.

Patent Reissues

190

Name

3

[222]

TOWNSEND BROS.

REGISTERED ATTORNEYS.

No. 370

IN THE

United States Patent Office.

\$30 RECEIVED

~~430-431-432-433~~

Ch. OCT. 20, 1903. L Z a ~~321-322-323-324-~~

CHIEF CLERK U. S. POTOMAC BLOCK

PATENT OFFICE (OPPOSITE CITY HALL)

~~217 S. BROADWAY-~~

BRADBURY BLOCK

304-306 S. BROADWAY

Robert Strain

Fruit-Graders

Los Angeles, Cal., Oct. 14, 1903. 190

MAILED

OCT. 14, 1903.

Townsend Bros.

Commissioner of Patents,

Sir:—Enclosed herewith find petition, power of attorney, specification, claims, drawing, and oath of Robert Strain; and oath of Fred Stebler in the matter of the application of Robert Strain for re-issue of patent on FRUIT-GRADERS, together with our

check for \$30 in payment of the Government fee thereon.

Kindly acknowledge receipt and oblige.

Very respectfully,

TOWNSEND BROS.

P. S.—We also enclose original letters patent 730412 to Robert Strain.

(ENCLOSURES:)

- Petition.
- Power of Attorney.
- Specification.
- Claims.
- Drawing.
- Oath (2).
- Check.

FMT.

FSL.

M. [223]

* * * * *

Serial No. 177990. Paper No. 1/2.

APPLICATION

MAIL ROOM.

OCT. 20, 1903.

U. S. PATENT OFFICE.

PETITION AND POWER OF ATTORNEY.

To the Commissioner of Patents:

Your petitioner, Robert Strain, a citizen of the United States and a resident of Fullerton, in the Orange County of ~~Riverside~~, and State of California, whose post-office address is Fullerton, California, prays that he may be allowed to surrender the letters-

patent for an improvement in Fruit Graders, granted to him June 9, 1903, Number 730,412, whereof Fred Stebler and Austin A. Gamble of Riverside, Cal, are now exclusive owners, and that letters-patent may be reissued to them, the said Fred Stebler and Austin A. Gamble, for the same invention upon the annexed amended specification. With this petition is filed an abstract of title, duly certified, as required in such cases, and the request and consent of the said owners and grantees of the said letters-patent hereto is appended.

Your petitioner hereby appoints

TOWNSEND BROS.

(A firm composed of James R. Townsend and Francis M. Townsend) of #430-433 Bradbury Block, Los Angeles, California, his attorneys, with full power of substitution and revocation, to prosecute said application, to make alterations and amendments therein, to sign the drawings, receive the patent, and to transact all business in the Patent Office in connection therewith, hereby revoking any and all Powers of Attorney heretofore given in connection therewith.

Signed at Los Angeles, California, this 14th day of October, A. D. 1903.

ROBT. STRAIN.

FMT.

J. [225]

To the Commissioner of Patents.

We, Fred Stebler and Austin A. Gamble, residents of Riverside, in the County of Riverside, and State of California, the exclusive owners of Letters-Patent

Number 730,412, dated June 9, 1903, granted to us for the invention of Robert Strain, of FRUIT GRADERS, do hereby consent to the foregoing petition and application for a reissue thereof on our behalf.

Dated at Riverside, California, this 14th day of October, 1903.

FRED STEBLER.

AUSTIN A. GAMBLE.

In presence of:

~~AUSTIN A. GAMBLE.~~

FMT-J. [226]

SPECIFICATION.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, Robert Strain, a citizen of the United States, residing at Fullerton, in the County of Orange and State of California, have invented new and useful Improvements in GRADERS, of which the following is a specification.

My invention relates to that class of graders designed to assort fruits, vegetables, such as potatoes, and nuts into lots of different sizes; and the objects thereof are to provide a machine for that purpose which is adjustable to a number of grades and which will prevent the fruit from bruising or being crushed. I accomplished these objects by the machine described herein and illustrated in the accompanying drawings, in which:—

Figure 1 is a perspective view of a fragment of my machine arranged for grading oranges or lemons.

Fig. 2 is a cross-section.

In the drawings my machine is designed as a

double grader—that is, two graders arranged side by side on the same frame, one side being a duplicate of the other side.

A represents the frame of the machine, on the top of which at one end of the machine, preferably at the upper end, is transversely mounted the driving-shaft B, carrying the driving-pulley C, by means of which motion is imparted thereto. When arranged as a double grader, on each end of the driving-shaft is rigidly mounted driving bevel-gears D, which mesh with driven bevel-gears E, rigidly mounted on the longitudinally extending driven shafts F. On the driving-shaft is rigidly mounted the rope-driving drum G, which imparts motion [227] to ropes H, which travel in the direction indicated by the arrow in Fig. 1—that is, from head to the foot thereof—in grooves I' in guide I, which forms one side of the fruit-runway. These ropes pass over pulley J at the lower end of the machine. On the driven shafts F are rigidly mounted a number of driving pulleys K, which drive belts L, that pass around the grading-rollers M, which are revolvably mounted in adjusting arms N, which have a longitudinal movement in guide-blocks O, affixed to the top of the frame. To each of these adjusting-arms is affixed a threaded bolt P, which passes through two stop blocks R, between which is an adjusting nut S on bolt P in threaded contact therewith, by the rotation of which the grade-rollers are moved toward or from the guide. Affixed to the top of the frame are band-tighteners to tighten the bands when the grade-rollers are moved away from the guide. These band-

tighteners are formed of a pulley T, adjustably mounted in slotted uprights U, affixed to the frame. Below the grade-rollers are as many bins V as there are grade-rollers, which are adapted to hold the fruit which will pass between the grade-roller and the guide. In order to prevent the fruit from being bruised, in each bin is mounted an apron W, of strong cloth, the inner end of which is higher than the outer, so that the fruit will roll to the outer end of the bin, where it has but a short distance to fall to reach the bottom of the bin. Each edge of these aprons is fastened to a rope X which passes over small pulleys Y, affixed to the side of the bin, and each end thereof has a weight *a* to hold the apron taut and to keep it in position. In the operation of my machine the first roller, or that nearest to the shaft B, is adjusted so as to permit the smallest grade of fruit to [228] pass between the roller and the guide. The next roller is adjusted for the next larger grade, and so on for each successive grade. In orange grading there are usually nine grades. Motion is imparted to the driving-shaft to cause a rope H to travel in a groove I' in guide I in the direction indicated by the arrow. This causes the grade-rollers to revolve, so that the top of the roller travels away from the guide. The fruit is fed into the run-way between the guide and the grade-rollers by any suitable device (not shown) in the usual manner.

It will be observed that as the grade-rollers are adjustable the distance between the roller and guide can be made small or large to adapt the machine to

grading small nuts or fruits or large nuts or large fruits. It will also be observed that the ropes carry the fruit toward the lower end of the machine and at the same time the grade-rollers are revolving, so as to keep the fruit from sticking in the run-way, thereby avoiding any tendency to crush the most delicate fruit. It will also be observed that the inner end of the apron gives a soft yielding surface for the fruit to fall upon a short distance below the roller, thus preventing any danger of its bruising. As the fruit rolls to the outer end of the apron it falls onto the bottom of the bin, and as the end fills up the apron can be moved toward the inner end of the bin, the weights providing for such adjustment. The fruit is packed from the outer end of the bin. By having short grade-rollers separately adjustable very fine grading may be done, and more than one roller may be adjusted to the same [229] grade if desired. If there should be a large quantity of the fruit of a single grade intermixed with a small quantity of fruit of different grades, this feature is very desirable, as a number of bins may be filled with fruit of the same grade. [230]

Having described my invention, what I claim as new, and desire to *desire* by Letters Patent, is:—

1. In a fruit-grader, in combination a plurality of independent transversely adjustable rotating rollers; a nonmovable grooved guide lying parallel with the plane which passes vertically and longitudinally through the center of said rollers, said rollers and guide forming a fruit-runway; a rope in the groove in said guide and means to move said rope.

2. In a fruit-grader having a bin means to break the fall of the fruit from the grading-way comprising a yielding soft apron above the bottom of the bin and extending under the grading-way, said apron having the end thereof under the grading-way at a higher elevation than the other end; the lower end extending too near the outer side of the bin.

3. In a fruit-grader, a grooved longitudinal guide; a rope in said groove; means to impart movement to said rope; one or more rollers lying parallel to said guide revolubly mounted in arms transversely adjustable; means to adjust said arms comprising a threaded bolt passing through two stop-blocks; a nut on said bolt in threaded contact therewith between said stop-blocks; and means to revolve each of said rollers comprising a belt passing around said roller and a pulley mounted on a shaft; and means to impart motion to said shaft.

4. In a fruit sizing machine, a runway for the fruit comprising cooperating parallel members, one of said members consisting of a series of rolls arranged end to end and disposed progressively at different distances from the other [231] member, forming communicating fruit-discharging apertures of progressively-different widths along the length of the runway, means for adjusting each roll independently to vary the size of the aperture formed thereby, and means for driving the rolls, substantially as described.

5. In a fruit sizing machine, a supporting-frame, a runway for the fruit comprising cooperating parallel members, one of said members consisting of a

series of rolls arranged end to end and disposed progressively at different distances from the other member, forming communicating fruit-discharging apertures of progressively-different widths along the length of the runway, brackets carrying the rolls, means mounted upon the frame for moving each bracket and adjusting each roll independently to vary the size of the aperture formed thereby, and means for driving the rolls, substantially as described.

6. In a fruit sizing machine, the combination with a supporting frame, of a fruit-runway formed by a relatively stationary member and a longitudinal series of rolls arranged end to end at different distances from said stationary member, thus providing communicating spaces of progressively-varying sizes for the discharge of the fruit, means for independently adjusting the rolls with relation to said stationary member, means for driving the rolls, and means for positively feeding the fruit along the runway, substantially as set forth. [232]

7. In a fruit grading machine, the combination with a supporting frame, of a fruit-runway comprising a relatively stationary member and a series of rolls disposed in parallel relation to said member and arranged end to end at different distances from the stationary member, forming communicating passages of progressively-varying sizes along the runway for the discharge of the fruit, means for adjusting the rolls with relation to the stationary member, means for driving said rolls, and a traveling belt moving in parallel relation to the stationary mem-

ber and rolls for positively feeding the fruit along the runway, substantially as described.

8. In a fruit-grading machine, the combination with a supporting-frame, of a central longitudinal divider, forming one side of each of two parallel runways, a series of rolls disposed on each side of the divider and arranged end to end at different distances from the divider, forming therewith a runway having progressively-varying discharge spaces for the fruit, means for adjusting the rolls of each series toward and from the common divider, means for driving the rolls, and belts disposed on opposite sides of the divider for positively feeding the fruit along the runways, substantially as described.

9. In a fruit-sizing machine, the combination with a supporting frame, of a longitudinal shaft, transverse shafts, one of which is adapted to be driven from a suitable source of power, a runway comprising a relatively stationary member and an adjustable member consisting of a series of rolls arranged parallel therewith and disposed end to end and at different distances from the stationary member, means for independently adjusting the rolls with relation to the stationary member, means for driving the rolls from the longitudinal [233] shaft, and a belt connected with the transverse shafts for positively feeding the fruit along the runway, substantially as set forth.

10. In a fruit-grading machine, a runway formed of two parallel members, one of said members consisting of a series of end-to-end rolls, brackets carrying the rolls, guides for the brackets, and means for

adjusting the brackets upon the guides, substantially as set forth. [234]

IN TESTIMONY WHEREOF I have signed my name to this specification in the presence of two subscribing witnesses, at Los Angeles, in the County of Los Angeles, State of California, this 14th day of October, 1903.

INVENTOR:

ROBT. STRAIN.

WITNESSES:

FREDERICK S. LYON.

F. M. TOWNSEND. [235]

OATH.

State of California,
County of Los Angeles,—ss.

ROBERT STRAIN, being first duly sworn, on his oath doth say; that he is the applicant and petitioner above named; that he verily believes himself to be the original, first and sole inventor of the improvements in FRUIT GRADERS set forth and claimed in the foregoing specification and for which he solicits a patent; that he does not know and does not believe that the same was ever known or used before his invention or discovery thereof; or patented or described in any printed publication in any country before his invention or discovery thereof or more than two years prior to his application; or in public use or on sale in the United States for more than two years prior to said application; and that no application for patent on said improvement has been

filed by him or his legal representatives or assigns in any foreign country prior to his application for letters-patent thereon in the United States of America; that deponent is a citizen of the United States of America and resides at Fullerton, in the County of Orange, State of California; that the deponent verily believes that the letters-patent referred to in the foregoing petition and specification and herewith surrendered are inoperative for the reason that the specification thereof is defective or insufficient and that such defect consists particularly in that though the devices and parts embodied to perform and accomplish the objects of deponent's invention and the construction and operation thereof are fully described in detail [236] in the description and fully shown in the drawings, the same is not brought out in the claims and through inadvertence and mistake no claim thereon was submitted; that he is advised and informed and verily believes that through the error, inadvertence and mistake of deponent and of deponent's attorneys, Hazard & Harpham, the invention clearly set forth in the original specification and drawings filed in deponent's original application was not fully covered in the claims submitted to the Patent-Office, and that through the ignorance, inadvertence and mistake of deponent and through the inadvertence, accident and mistake of deponent's attorneys, and through the inadvertence, accident and mistake of the Examiner of the Patent-Office, this deponent's said application was finally allowed and permitted to go to issue and a patent to be granted thereon without the suggestion to this

deponent of claims made by another party then and during the pendency of the deponent's application for said Letters-Patent pending in the United States Patent Office and covering patentable and novel subject matter shown in the drawings and set forth in the specification of deponent's original application, which said claims made by said co-pending applicant should have been suggested for the purpose of interference to this applicant under rule 96 of the United States Patent Office; that said co-depending application so referred to was the application of one Charles Rayburn, Visalia, California, filed August 18, 1902, Serial Number 120,031, and upon which Letters-Patent of the United States number 726,756, dated April 28, 1903, have been granted and issued.

And the deponent says that the errors which render such patent so inoperative arose from inadvertence, accident and mistake and without any fraudulent intention on the part of [237] deponent; and that the following is a true specification of the errors which it is claimed constitute such inadvertence and mistake, relied upon and that such errors so particularly specified arose or occurred as follows:—

When deponent completed the invention disclosed in his said Letters-Patent he was entirely uninformed as to and unversed in the requirements of the Patent Law and the rules of the Patent Office in regard to securing Letters Patent for inventions; that he retained the firm of Hazard & Harpham, of Los Angeles, California, as his attorneys, to secure for him Letters-Patent upon his invention; that deponent fully explained his said invention

to his said attorneys and they prepared the specification and drawings filed; that deponent read over said specification and carefully looked over the drawings; that it appeared to the deponent that the drawings correctly illustrated his Fruit Grader and that the description of the construction was correct and seemed to the deponent to set forth the construction; that deponent did not understand the nature or legal effect of the "claims" presented, but as the drawings correctly showed deponent's invention and as the description appeared to describe the construction correctly, deponent believed and understood that he had fully set forth his said invention, and by so fully showing in the drawings and describing in the specification his said invention, had thereby fully covered the same as required by law; that through inadvertence and mistake deponent failed to fully comprehend and understand the nature and legal effect of claims or of the necessity thereof; but that deponent at the time of executing said application and at all times thereafter until advised to the [238] contrary by Frederick S. Lyon and Townsend Bros., Patent Solicitors and attorneys of Los Angeles, California, verily believed he had in due accordance with the Patent Law and the Rules of the Patent Office, fully claimed his said invention, as now set forth in the foregoing specification and claims; that he is informed and believes that on Saturday, the tenth day of October, 1903, his said Letters-Patent Number 730,412 were submitted by Fred Stebler, one of the owners thereof, to the said Frederick S. Lyon and Townsend Bros. for consideration

and investigation as to the scope thereof, and that then for the first time the inaccuracy, defects and insufficiency of the specification of deponent's said Letters-Patent were made known to the owners of said Letters-Patent, and that such deficiency was for the first time made known to this deponent immediately thereafter, to-wit, on October 12th, 1903, and that deponent was then first advised of and became aware of the legal effect and necessity of claims and that the claims of said Letters-Patent were not in accordance with the law and did not refer to the parts utilized by deponent to effectuate his invention; that deponent makes this affidavit for the purpose of securing a reissue of such Letters-Patent for and on behalf of his said Assignees, Fred Stebler and Austin A. Gamble, of Riverside, California.

ROBT. STRAIN.

Subscribed and sworn to before me this 14th day of October, 1903.

[Notarial Seal]

WARREN E. LLOYD,

Los Angeles

Notary Public in and for ~~ORANGE~~ County, State of California.

FMT-J. [239]

State of California,

Riverside

County of ~~Orange~~,—ss.

FRED STEBLER, being first duly sworn, on oath says: that he is one of the owners of Letters-Patent Number 730,412 dated June 9, 1903, for FRUIT GRADERS, the invention of Robert Strain, of Ful-

lerton, California; that deponent and deponent's said co-owner and partner, Austin A. Gamble, were ignorant of and unadvised as to any defect or insufficiency in the specification of said Letters-Patent until October 10, 1903, when deponent submitted said Letters-Patent to Frederick S. Lyon and Townsend Bros., Patent Solicitors and Attorneys of Los Angeles, California, for examination and opinion as to scope and infringement; that he was then advised that the said Letters-Patent did not contain claims to which said Robert Strain was entitled as the same appear in the patent to Chas. Rayburn, Number 726,756, dated April 28, 1903, for FRUIT GRADERS, and that he was advised by said Frederick S. Lyon and by Francis M. Townsend of Townsend Bros., that said Letters-Patent Number 730,412 were inoperative because of the insufficiency of the specification therein, and that he was thereupon advised to file an application for a reissue of said Letters-Patent number 730,412, and that upon consultation with his said partner, Austin A. Gamble, they, on October 12, 1903, ordered and directed the said Townsend Bros., and Frederick S. Lyon to prepare and file on behalf of deponent and his said partner an application for a reissue of said Letters Patent, incorporating therein claims from the said patent to Rayburn, which he is advised and believes were the invention of Robert Strain, deponent's assignor and which should have been suggested [240] to the attorneys for Robert Strain during the prosecution of the application of said Robert Strain and Charles Rayburn in the United States Patent Office; that

said defect insufficiency and inaccuracy in the specification of said Letters-Patent Number 730,412 arose through inadvertence, accident and mistake and without the knowledge of this deponent or his said partner, Austin A. Gamble, and without any fraudulent or deceptive intention on the part of this deponent or his said partner, and that immediately, upon being advised of such defect and insufficiency, deponent and his said partner have taken steps to correct the same by ordering their said attorneys to prepare, file and prosecute an application for a re-issue of said Letters-Patent.

FRED STEBLER.

Subscribed and sworn to before me this 14th day of October, 1903.

[Notarial Seal] WM. STUDABECKER,
Notary Public in and for Orange Riverside County,
State of California.

FMT.

J. [241]

* * * * *

2-260.

Div. ——— Room No. 315.
Address only the Commissioner of
Patents.
Washington, D. C.

Paper No. 1.
All communications respecting this
application should give the serial number,
date of filing, and title of invention.

DEPARTMENT OF THE INTERIOR.
UNITED STATES PATENT OFFICE.

Washington, D. C. October 31, 1903.

MAILED “ “ “

Robert Strain,

Care Townsend Bros.,

Los Angeles, California.

Please find below a communication from the EX-

AMINER in charge of your application, #177,990, filed October 21, 1903 (reissue) for Fruit Graders.

F. I. ALLEN,

~~E. B. MOORE,~~

Commissioner of Patents.

The application of Rayburn, patent No. 726,756, was passed to issue March 18, 1903, by one assistant in this division, who had sole charge of this case, while owing to pressure of work the application of Strain was handled by another assistant who had on March 12, 1903, written a rejection in that case, and when the pending search of the Rayburn case was made, the Strain drawing was not known of by the assistant in charge of that case.

A similar lapse occurred on the issuance of the Strain case, for it appears that Rayburn paid his final fee April 9, 1903, and the drawing was of course sent to the printer within a day or two, while the Strain case was passed to issue five days later, thus in that pending search the drawing of Rayburn was overlooked. It was owing to these circumstances that mutual cognizance of the two applications was not had by the persons having charge of them.

Claims 4 to 10, inclusive, are identical with the claims in patent 726,756, C. Rayburn, April 28, 1903, granted six weeks prior to the applicant's patent, but upon an application filed about [247] three months later than applicant's original filing date. It is proper, however, to call attention to the fact that the date of execution of applicant's original oath is April 19, 1902, while that of Rayburn's oath is December 14, 1901. It is necessary, owing to the

relative dates of the two patents to reject applicant's last seven claims, as above noted, upon Rayburn. As applicant's oath antedates the filing of Rayburn's application, another oath will not be needed, and it will only be necessary, in response to the present letter, to make a formal repetition of the request for declaration of interference.

LEWIS B. WYNNE,
Examiner,
Division XXV.

C. P. G. [248]

* * * * *

2-079.

INTERFERENCE.

Interference No.	Paper No. 3.
Name—Strain.	
Serial No. 177,990.	
Title,	
Filed,	
Interference with Rayburn.	

DECISIONS OF

Primary Examiner,	Dated Nov. 5/03.
Ex'r of Interferences,	Dated June 23/04.
Board,	Dated
Commissioner,	Dated

REMARKS.

Fav. dec'n by Ex'r X.

“ “ appd. by Board Oct. 24/04.

This should be placed in each application or patent involved in interference in addition to the interference letters by Primary Examiner. [251]

2-213.

Forwarded from Div. 25 to Examiner of Interferences.
Nov. 5, 1903.

Paper No.
(Interference)
Paper No. 4.

DEPARTMENT OF THE INTERIOR.
UNITED STATES PATENT OFFICE.

Copy of this letter sent assignees.

Washington, D. C., Nov. 10, 1903. 191

MAILED " " "

Robert Strain,
Care Townsend Bros.,
Los Angeles, Cal.

Please find below a copy of a communication from the Examiner concerning your reissue application #177,990, filed October 21, 1903, for Fruit Grader (Original patent 730,412, dated June 9, 1903).

Very respectfully,
F. I. ALLEN,
E. B. MOORE,
Commissioner of Patents.
23151.

Room No. 315.
Address only
The Commissioner of
Patents, Washington,
D. C.
6-1636.

Your case, above referred to, is adjudged to interfere with others, hereafter specified, and the question of priority will be determined in conformity with the Rules.

The statement demanded by Rule 110 must be

sealed up and filed on or before the 22 DEC. 1903 day of ———, 191—, with the subject of the invention, and name of party filing it, indorsed on the envelope. The subject-matter involved in the interference is

1. "In a fruit sizing machine, a runway for the fruit comprising co-operating parallel members one of said members consisting of a series of rolls arranged end to end and disposed progressively at different distances from the other member, forming communicating fruit-discharging apertures of progressively different widths along the length of the runway, means for adjusting each roll independently to vary the size of the aperture formed thereby, and means for driving the rolls, substantially as described.
2. "In a fruit sizing machine, a supporting frame, a runway for the fruit comprising co-operating parallel members, one of said members consisting of a series of rolls arranged end to end and disposed progressively at different distances from the other member, forming communicating fruit-discharging apertures of progressively different widths along the length of the runway, brackets carrying the rolls, means mounted upon the frame for moving each bracket and adjusting each roll independently to vary the size of the aperture formed thereby, and means for driving the rolls, substantially as described.
3. "In a fruit sizing machine, the combination with

a supporting frame, of a fruit runway formed by a relatively stationary member [252] and a longitudinal series of rolls arranged end to end at different distances from said stationary member, thus providing communicating spaces of progressively varying sizes for the discharge of the fruit, means for independently adjusting the rolls with relation to said stationary member, means for driving the rolls, and means for positively feeding the fruit along the runway, substantially as set forth.

4. "In a fruit grading machine, the combination with a supporting frame, of a fruit runway comprising a relatively stationary member, and a series of rolls disposed in parallel relation to said member and arranged end to end at different distances from the stationary member, forming communicating passages of progressively varying sizes along the runway for the discharge of the fruit, means for adjusting the rolls with relation to the stationary member, means for driving said rolls, and a travelling belt moving in parallel relation to the stationary member and rolls for positively feeding the fruit along the runway, substantially as described.
5. "In a fruit grading machine, the combination with a supporting frame, of a central longitudinal divider, forming one side of each of two parallel runways, a series of rolls disposed on each side of the divider and ar-

ranged end to end at different distances from the divider, forming therewith a runway having progressively varying discharge spaces for the fruit, means for adjusting the rolls of each series toward and from the common divider, means for driving the rolls, and belts disposed on opposite sides of the divider for positively feeding the fruit along the runways, substantially as described.

6. "In a fruit sizing machine, the combination with a supporting frame, of a longitudinal shaft, transverse shafts, one of which is adapted to be driven from a suitable source of power, a runway comprising a relatively stationary member and an adjustable member consisting of a series of rolls arranged parallel therewith and disposed end to end and at different distances from the stationary member, means for independently adjusting the rolls with relation to the stationary member, means for driving the rolls from the longitudinal shaft, and a belt connected with the transverse shafts for positively feeding the fruit along the runway, substantially as set forth.
7. "In a fruit grading machine, a runway formed of two parallel members, one of said members consisting of a series of end to end rolls, Brackets carrying the rolls, guides for the brackets, and means for adjusting the brackets upon the guides, substantially as set forth."

(a) The interference involves your application for reissue, above identified, and patent #726,756, patented April 28, 1903, to Charles Rayburn, for Fruit Graders, whose attorneys of record are H. B. Willson & Co., of Washington, D. C.; and in view of the filing [253] dates of the applications for that patent and patent #730,412, Strain is hereby declared to be the senior party to the interference.

(c) The relations of the counts of the interference to the claims of the respective parties is as follows:

Counts:	Rayburn:	Starin:
1,	1,	4,
2,	2,	5,
3,	3,	6,
4,	4,	7,
5,	5,	8,
6,	6,	9,
7,	7,	10,

LEWIS B. WYNNE,
Primary Examiner,
Division XXV.

C. P. G. [254]

* * * * *

1903.

CLASSIFICATION.

[In pencil:] K.

Class.

CONTENTS:

Print Photoliths.

Application papers. O. K.

1. Rej. Oct. 31, 1903.
2. Letter with Telegram Nov. 3, 1903.
3. X. Card.

4. Intf. Letter Nov. 10/03.
5. Ass'o. power of atty. Mar. 21, 1904.
- 6.
- 7.
- 8.
9. 130. THRASHING.
10. Fruit and Vegetable Separators.
- 11.
- 12.
- 13.
- 14.
- 15.
- 16.
- 17.
- 18.
- 19.
- 20.
- 21.
- 22.
23. Fruit & Veg. Seps.

TITLE:

Improvement in Fruit Grader.

O. W.

M. H. Y.

(Endorsed.) [263]

* * * * *

[Title of Court and Cause.]

Depositions of L. E. Tucker, T. C. Jameson, F. K. Adams, F. E. Proud, H. E. Walcott, George D. Parker and Edward S. Cobb, taken on behalf of the

defendants, before Nina W. Buddecke, Suite 314 International Bank Building, Los Angeles, California.

[265]

* * * * *

[Title of Court and Cause.]

Proofs taken on behalf of complainant in the above-entitled suit at the office of Longley, Benjamin & Company, Suite 314, International Bank Building, in the city of Los Angeles, California, commencing at the hour of 10 o'clock A. M. of Monday, April 29, 1912, before Nina W. Buddecke, a notary public in and for the County of Los Angeles and State of California, by agreement without notice, notice being waived, both parties being present with their counsel and agreeing to the taking of testimony at this time and place.

Present: FREDERICK S. LYON, Esq., on behalf of Complainant;

N. A. ACKER, Esq., on behalf of Defendants. [268]

Mr. ACKER.—I am going to give notice that I will call F. E. Proud as a witness to the prior use and knowledge. His name was not set up with the others.

Mr. LYON.—As to what prior knowledge and use?

Mr. ACKER.—Just what is in the answer.

Mr. LYON.—The way that is set up in the answer? One of the uses set up in the answer?

Mr. ACKER.—Yes. And the answer may be considered so amended?

Mr. LYON.—As to which use?

Mr. ACKER.—I will put them under the general

use. Under the first paragraph on page 14 of the answer. I want to add the name of F. E. Proud as one of the parties to whom it was known.

It is stipulated by and between counsel for both parties hereto present that the signing of the depositions be waived, unless especially called for by either party.

[Deposition of L. E. Tucker, for Defendants.]

L. E. TUCKER, a witness produced on behalf of the defendants, being first duly sworn according to law, testified as follows, to wit.

Direct Examination.

(By Mr. ACKER.)

Q. 1. Please state your name, age and occupation and residence.

A. L. E. Tucker, thirty-six years old; foreman of fruit packing-house.

Q. 2. What fruit packing-house are you with?

[269] A. Upland Citrus Association.

Q. 3. How long have you been connected with the Upland Citrus Association?

A. About twelve years.

Q. 4. How long have you been identified with the fruit industry of this state?

A. About that length of time; about twelve or thirteen years.

Q. 5. Are you familiar with various devices for use in the grading and sizing of fruit, generally?

A. Yes, sir.

Q. 6. Is any means employed in packing-houses with which you are connected for the sizing of the

(Deposition of L. E. Tucker.)

fruit, and, if so, what kind of fruit?

A. Yes; there are sizers for sizing oranges.

Q. 7. What form of sizer for oranges was in use at the packing-house when you took employment?

Mr. LYON.—We object to that as not the best evidence, no foundation laid for the introduction of secondary evidence.

A. Rope-and-roller. The sizer known as rope-and-roller, California sizer.

Q. 8. (By Mr. ACKER.) Please describe the construction of the sizer called the California sizer.

Mr. LYON.—The same objection. It is understood that the same objection is repeated to each question and all testimony of the witness in answer thereto, without the necessity of repetition.

Q. 9. (By Mr. ACKER.) Go right ahead, Mr. Tucker.

A. It was a rope-and-roller. Rollers — three [270] rollers on each side and two ropes, running on a center piece in grooves.

Q. 10. How were those rollers arranged relative to each other?

A. Well, they were end to end. That is, they were along in a row, three rollers right behind one another, and they were connected together with a socket in one and a pin in the other, which fastened them together.

Q. 11. Were you able to vary the grade area for the fruit in that machine?

Mr. LYON.—The further objection is noted that it is leading.

(Deposition of L. E. Tucker.)

A. Yes; you could set the sizer to varying sizes for the oranges.

Q. 12. (By Mr. ACKER.) I hand you a photograph, Mr. Tucker, and ask you to examine the same and state whether or not you can identify the photograph.

A. Yes; this is a photograph of the rope-and-roller sizer.

Q. 13. Is that a photograph of the rope-and-roller sizer which was in use at the packing-house you have testified to during your term of employment?

Mr. LYON.—The further objection is noted that it is leading.

A. Yes, sir.

Q. 14. (By Mr. ACKER.) For what length of time was that sizer in use at the packing-house to which you have testified, Mr. Tucker?

A. Well, that sizer was in use there—so far as I know, that sizer was in use there ten or eleven or twelve years.

Q. 15. Was it in use at the packing-house at the time you entered the employ of the Upland Citrus Association? [271]

Mr. LYON.—Objected to as leading.

A. Yes, sir.

Q. 16. (By Mr. ACKER.) You say it was?

Mr. LYON.—The same objection.

A. Yes, sir.

Q. 17. (By Mr. ACKER.) Was the sizer in use in connection with the grading and sizing of oranges?

Mr. LYON.—Objected to as leading.

(Deposition of L. E. Tucker.)

A. Yes, sir.

Q. 18. (By Mr. ACKER.) For what length of time was it employed as a sizer for grading fruit?

Mr. LYON.—Objected to as assuming facts not testified to by the witness, and as leading.

A. It was the only sizer we used there. It was used continually during the orange season.

Q. 19. (By Mr. ACKER.) What do you mean by “used continually during the orange season”?

A. Well, they don't run oranges the year round. There is about seven or eight months of the year, from one year to another.

Q. 20. Is the machine still in existence?

A. One similar to that.

Q. 21. Similar to that photograph?

A. Yes, sir.

Q. 22. Is it being used at the present time?

A. Yes, sir.

Q. 23. For the sizing of oranges? A. Yes, sir.

Q. 24. Was the sizer or grader a successful one?

[272]

Mr. LYON.—Objected to as leading and as incompetent and calling for a conclusion of the witness and not for a statement of facts.

A. Yes.

Q. 25. (By Mr. ACKER.) You say it was?

Mr. LYON.—The same objection.

A. Yes, sir.

Q. 26. (By Mr. ACKER.) Have you any form of sizer in use at the Upland Citrus Association packing-house for the sizing of oranges? A. Yes, sir.

(Deposition of L. E. Tucker.)

Q. 27. What form of sizer?

A. The rope-and-roller sizer, only they are individual rollers for regulating each size separate, and it is longer than that one.

Q. 28. That is, longer than the sizer represented by the photograph? A. Yes, sir.

Q. 29. And you say each roller is separately driven? A. Yes, sir.

Q. 30. Driven by what means?

A. By a belt.

Q. 31. How do the grading elements of that sizer compare with the grading elements of the sizer represented by the photograph which you have been testifying to?

Mr. LYON.—Objected to as not the best evidence, incompetent, no foundation laid, the witness not having qualified to answer the question.

A. I don't think the grader is any better than the other one. [273]

Q. 32. (By Mr. ACKER.) That is, you don't think—

A. I don't think it sizes the oranges any better.

Q. 33. By whom was the sizer that you are using in addition to the one represented by the photograph, manufactured, or do you know?

A. I suppose Mr. Stebler.

Q. 34. What is known as the Stebler sizer or the Strain sizer?

A. Known as the Stebler sizer, I would call it. Stebler put it in, so I suppose it would be the Stebler sizer.

(Deposition of L. E. Tucker.)

Q. 35. That is, Mr. Stebler was present in the room? A. Yes, sir.

Mr. ACKER.—I will introduce the photograph in evidence and ask that it be marked “Defendants’ Exhibit Photo Upland Sizer.”

Mr. LYON.—Objected to as incompetent, no foundation laid, and not the best evidence.

Q. 36. (By Mr. ACKER.) Can you state whether the machine represented by the photograph exhibit was a successful operating and efficient sizer for the grading and sizing of fruit?

Mr. LYON.—Objected to as leading and incompetent, the witness not having qualified to answer the question.

A. Yes, sir.

Q. 37. (By Mr. ACKER.) Did you operate the sizer represented by the photograph exhibit?

A. I did.

Q. 38. During all the time of your employment with the association?

A. During all my employment as foreman.

Q. 39. Are you familiar with the use and working of the [274] apparatus during the whole of the time of your employment with the association?

A. Yes, sir.

Q. 40. When did you say you entered the employ of the Upland Citrus Association?

A. So far as I can remember, it was about 1900.

Q. 41. Where is the plant of the Upland Citrus Association located, and by “plant” I mean the packing-house? A. Upland, California.

(Deposition of L. E. Tucker.)

Q. 42. You have termed the apparatus represented by the photograph exhibit as a California sizer. Was the California sizer a well-known sizer in this district for the sizing of fruits and oranges?

Mr. LYON.—Objected to as leading and calling for the conclusion of the witness, and not the best evidence, the witness not having qualified to answer the question.

A. That is all the name I ever heard it given—California sizer.

Q. 43. (By Mr. ACKER.) My question is, was it a well-known sizer in this market?

Mr. LYON.—The objection is repeated.

A. So far as I know, it was well-known. It was the only sizer I knew when I went to work there.

Q. 44. (By Mr. ACKER.) I direct your attention to a model of an apparatus before you, and ask you to state if you can identify the apparatus disclosed thereby, and describe what is disclosed by the model.

Mr. LYON.—Objected to as incompetent and not the best evidence, the witness not having qualified to answer the [275] question.

A. That is very much like that sizer.

Q. 45. (By Mr. ACKER.) How does that sizer operate, Mr. Tucker?

Mr. LYON.—Objected to as incompetent, no foundation laid, the witness not having qualified to answer the question, and that it is indefinite, it not appearing whether the question is addressed to the model which has been shown the witness or to the

(Deposition of L. E. Tucker.)

sizer to which he has already referred; and if the question is addressed to the model, it is not shown that the witness has ever examined the same or has had any familiarity therewith.

Q. 46. (By Mr. ACKER.) You understand my question is directed towards the model which is on the desk before you.

Mr. LYON.—The objection is repeated.

Q. 47. (By Mr. ACKER.) I ask whether you were familiar with the machine of that type?

A. Yes, sir.

Q. 48. And whether you can describe the operation of the machine of that type? A. Yes, sir.

Q. 49. Will you describe the structural arrangement and operation of the machine illustrated by the model?

Mr. LYON.—The same objection as last noted.

A. You want to know how it was operated?

Q. 50. (By Mr. ACKER.) How it was operated, and its construction.

Mr. LYON.—The same objection.

A. Well, it was run by two little belts, one at the end where the large rollers are that operated the rollers, and the rollers are divided just like that model there, and means [276] for setting them and pushing them back and forth to regulate the size of the fruit.

Q. 51. (By Mr. ACKER.) How does the model conform in its structural arrangement to the sizer you have testified to as having been used in the packing-house of the Upland Citrus Association during

(Deposition of L. E. Tucker.)

your term of employment?

Mr. LYON.—Objected to as leading and suggestive of the answer, and not the best evidence. Further, on the ground that it is not the proper method of proof, not proving a prior use, it not being shown that this witness has anything whatever to do with the manufacture of the model in question or that he ever saw it before, nor has he shown any familiarity with the model.

A. This is built much the same. There is some difference, of course. These pulleys at the end don't run on a shaft like that.

Q. 52. (By Mr. ACKER.) How did they run?

A. They were set in kind of brackets and you could slip them out and take them off. They didn't have a shaft run through them.

Q. 53. How does it conform so far as the grading members?

Mr. LYON.—The same objection as last noted on the record.

A. Well, it is practically the same as far as sizing the fruit goes.

Q. 54. (By Mr. ACKER.) How are the grading rollers in the model arranged?

A. You mean to adjust it?

Q. 55. No; how are they arranged? These rollers?

A. They are all in a row, so far as I can see, or end to [277] end.

Q. 56. You say they are arranged end to end?

A. They are.

(Deposition of L. E. Tucker.)

Q. 57. How are the rollers supported?

A. Supported by brackets or bearings.

Q. 58. Are there any means disclosed for adjusting the rollers relative to the opposing member?

Mr. LYON.—Objected to as leading, not the best evidence, and that the model speaks for itself.

A. There is means provided for adjusting the sizer there that I have reference to in the picture.

Q. 59. (By Mr. ACKER.) Does the model disclose a fruit-grading machine having a run-way formed of two parallel members?

Mr. LYON.—Objected to as leading.

A. Yes, sir.

Q. 60. (By Mr. ACKER.) One of those members composed of end-to-end rolls?

Mr. LYON.—Objected to as leading.

A. Yes, sir.

Q. 61. (By Mr. ACKER.) Are there disclosed brackets carrying the rolls?

Mr. LYON.—Objected to as leading.

A. Yes, sir.

Q. 62. (By Mr. ACKER.) Are there disclosed means for adjusting the brackets and guides?

Mr. LYON.—The same objection.

A. There was in the original sizer.

Q. 63. How about the model?

A. I don't know whether they slide back and forth or not. [278]

Q. 64. Examine the model and ascertain.

A. Yes, sir; there is means there for loosening them up.

(Deposition of L. E. Tucker.)

Q. 65. I understand you to state that the model before you represents a structural device or sizer to which you have testified to as having been used in the Upland Citrus Association for the sizing of its fruit?

Mr. LYON.—Objected to as leading and as incompetent and not the best evidence, and calling for the conclusion of the witness, and not for a statement of facts.

A. Yes, sir.

Mr. ACKER.—I shall ask the notary to mark the model for identification.

(The model is marked “Model California Sizer for Identification.”)

Cross-examination.

(By Mr. LYON.)

Q. 66. When you originally went into the employ of the Upland Citrus Association at Upland, California, how many grades of fruit was it possible to take off the grader? A. What grader?

Q. 67. There used.

A. You mean sizes of fruit?

Q. 68. Yes.

A. We took them all off; twelve sizes. What I mean is, the way we ran the fruit by that sizer, there is twelve sizes of fruit, and we ran two of them in the first bin that came through that big roller, and three sizes over the end.

Q. 69. I don't think that you quite understand my question, [279] Mr. Tucker, and I want to be certain that you did and do. I ask you how many

(Deposition of L. E. Tucker.)

sizes of fruit it was possible to take off of the sizer when you first went into the employ of the Upland Citrus Association at Upland, California?

A. All of them.

Q. 70. Twelve? In the manner indicated by you?

A. I indicated the way it was done.

Q. 71. And how many sections of rollers were there on each side of the run-way? A. Three.

Q. 72. And how many different diameters did each section of the roller have?

Mr. ACKER.—I object to the question unless counsel will explain what he means by “section of the roller.” If he means the stepped portion, he should explain. If he means the individual rollers, he should say so.

Mr. LYON.—We object to counsel interrupting the cross-examination of this witness, at least until such time as it is shown that the witness does not understand the question, and I protest against the interruption under any guise whatever.

Mr. ACKER.—No interruption is intended, but the counsel is using expressions not heretofore employed, and we wish him to designate clearly to the witness what he means by such questions.

A. The way I understand that is the jump-offs from the rollers. There was nine of them.

Q. 73. (By Mr. LYON.) Describe with clearness, Mr. Tucker. There were three sections, as you say, of each roller on each side of the grader? [280]

A. Yes, sir.

Q. 74. In other words, it was a double grader,

(Deposition of L. E. Tucker.)

having two run-ways?

A. Two sets of rollers and a division with two ropes.

Q. 75. When you went to work in the Upland Citrus Association, did that machine have three sections or sets of rollers, making up each side of the run-way?

A. So far as I can remember; to the best of my recollection.

Q. 76. Are you positive that it had more than two of such sections on each side? A. Yes, sir.

Q. 77. If shown to be in error as to that, you would then conclude, would you, that you had in mind the machine as it had afterwards been changed and not as it existed when you first came there, when heretofore testifying?

Mr. ACKER.—Objected to on the ground that there is no proof shown that it was changed. It assumes something that has not been proven as yet.

A. To the best of my recollection, it had three rollers. The machines that were taken out of there—there was no change made on the sizer so far as I know while I was there.

Q. 78. (By Mr. LYON.) Were you employed in the Upland Citrus Association at the time that the Packing-house Equipment Company reconstructed the equipment there?

A. I was employed at the Upland Citrus Association when the Equipment Company did do some work there.

Q. 79. What work did they do?

(Deposition of L. E. Tucker.)

A. They put in some sort of tables and scales.

Q. 80. Is that all? [281]

A. And some scales.

Q. 81. Is that all?

A. That is all I can remember.

Q. 82. Are you to be understood as testifying that that is all that they did?

A. That is all that I can recollect right now.

Q. 83. When was that?

A. I don't recall exactly when those parties did that.

Q. 84. What year?

A. I should think about 1905 or '06 or somewhere along there. Maybe it was before that. I can't say intelligently in regard to that.

Q. 85. When was this old grader removed—the one you have referred to in your direct examination?

A. Either two or three years after that. Somewheres near there.

Q. 86. With the old grader that you say was in the packing-house of the Upland Citrus Association at the time that you went into its employ, some ten or twelve years ago, each section of the roller had three different sizes or diameters, didn't it?

A. To the best of my recollection, it had.

Q. 87. Are you sure it did not have more than three?

A. That is, you mean more than three sections?

Q. 88. No; more than three different diameters on each section of the roller—each integral working piece of the roller having more than three diameters.

(Deposition of L. E. Tucker.)

A. To the best of my recollection, it only had three.

Q. 89. What was the object of the different diameters on those sections? [282]

A. So as to make the different sizes of fruit.

Q. 90. Explain what you mean more fully, please.

A. Can I show on the model?

Mr. ACKER.—Yes.

A. As the orange comes down here it rolls along here and will pass over from here to here, and when it comes off here, it may drop into this hole here or it may go over and drop down here.

Q. 91. (By Mr. LYON.) And each one of these sections or rollers of which you say there were three in this old Upland Citrus Association machine, had three different diameters, forming three different sizes of openings, did it? A. Yes, sir.

Q. 92. How could you adjust each one of those three sizes of openings with relation to the other?

A. The way the sizes were, you would have to adjust here in the center—pull this end of the roller out just the way you wanted to make your sizes run.

Q. 93. That would adjust all three of the sizes simultaneously? A. On that roller.

Q. 94. Assuming that such old sizer had three sections or three rollers on each side, the adjustment of any one of these three sections or rollers would adjust the three sizes, simultaneously?

A. Yes, sir; it would affect—if you shove this in, it would affect each size. It would have that much go over the end, anyway.

Q. 95. It would affect those going over the end

(Deposition of L. E. Tucker.)

only if [283] the adjustment was such as to take a different size which had been going over the end, and permit it to drop at the last hole?

A. If you pull this out far enough it would permit it to drop in here, so hardly anything would go over here.

Q. 96. When you say you have sized on this machine twelve sizes, you were slightly inaccurate in that statement, were you not, because you said three sizes went over the end? Those three went over together, didn't they? A. Yes, sir.

Q. 97. So you took off nine sizes by the sizer?

A. We opened this end up here far enough so that two sizes went in there, and took the three sizes over here.

Q. 98. When was it that you put in the independently adjustable roller grader that you have referred to?

A. I think it was two years ago this fall. It may be three. I may be wrong about that. It was either two or three years this fall that we first had it there.

Q. 99. What machine did you displace with that independently adjustable roller grader?

A. A machine similar to the model.

Q. 100. And how many of those independently adjustable roller graders did the Upland Citrus Association purchase? A. Four sizers.

Q. 101. Are you sure it was four?

A. Four sizers.

Q. 102. You mean four that year? A. Yes, sir.

Q. 103. How many afterwards?

(Deposition of L. E. Tucker.)

A. Three. [284]

Q. 104. Making seven of what you call Stebler or independently adjustable roller graders?

A. Yes, sir.

Q. 105. That is the kind of grader you are using exclusively there now? A. Yes, sir.

Q. 106. What was the reason for changing from this machine, Defendant's Exhibit Photo Upland Sizer, to the Stebler independently adjustable grader?

A. Well, for one thing, the old sizer was about wore out; another was to get longer bins—more packing capacity.

Q. 107. Any other reason?

A. Well, it was better to set each size separate.

Q. 108. You could not do that with the old grader?

A. Not each size.

Redirect Examination.

(By Mr. ACKER.)

Q. 109. Did I understand you to state that you are using at the Upland packing-house exclusively Stebler sizers?

A. Yes, sir; that is what I know them by.

Q. 110. Are you using at the present time the old California sizer?

Mr. LYON.—Objected to as leading.

A. Well, there is one of those in use.

Q. 111. (By Mr. ACKER.) When did you state you entered the employ of the Upland Citrus Association?

A. About 1900, as far as I can remember.

(Deposition of L. E. Tucker.)

Q. 112. Have you any way by which you can fix definitely [285] that time?

A. I have nothing at hand at present by which I can fix it.

Q. 113. You cannot state whether you entered positively in 1900 or not?

A. No; it was about that. I can't state positively that it was exactly that.

Q. 114. How many grades does the Stebler sizer size to? A. How many grades or how many sizes?

Q. 115. How many sizes? A. Twelve.

Q. 116. The same number of sizes as the California sizer?

Mr. LYON.—Objected to as leading.

Mr. ACKER.—I will reform the question. How many sizes did the California sizer size?

A. The California sizer was only made for nine sizes, but by manipulating we would run all of them—the twelve sizes.

Recross-examination.

(By Mr. LYON.)

Q. 117. You did not separate the last three sizes by the California sizer at all?

A. No, sir; we ran them all into one bin.

Q. 118. Are you sure that it was not in '99 that you first went to work for the Upland Citrus Association?

A. No; I am not sure of that. I have nothing at hand to show exactly the time I did go to work. It was along about that time, somewhere, close.

Q. 119. Whereabouts in the Upland Citrus Asso-

(Deposition of L. E. Tucker.)

ciation packing-house is this old California sizer now in use? [286]

A. Well, it is outside of the building, used for sizing culls.

Q. 120. When did you last see it used?

A. Saturday.

Q. 121. What is the object of sizing the culls?

A. The culls are sold to cull men who object to the smaller sizes. They don't want the smaller sizes, and we set the old sizer up there to sort the sizes out. They won't take the small sizes.

Q. 122. How long have you been using it there?

A. This is the first season.

Q. 123. Just rigged that up as a make-shift or convenience in handling the culls? A. Yes, sir.

Q. 124. The machine is in condition for actual sizing of oranges, is it? A. Yes, sir.

Q. 125. How many grades or sizes do you make of culls by that sizer now?

A. Well, they are making all the sizes, but they don't go into separate bins. They run together more.

Q. 126. The sole object is to take out the small ones?

A. Well, to size them, too. We have to size them a little bit—they won't take the three or four smaller sizes, and we have to size them out.

Q. 127. Those are sizes that would go over the end of the sizer—in the three grades that you used to mix in sizing oranges?

(Deposition of L. E. Tucker.)

A. No; the little ones are the ones they won't take.
[287]

Redirect Examination.

(By Mr. ACKER.)

Q. 128. Does it size to size in the same manner as the Stebler sizer?

Mr. LYON.—Objected to as incompetent and calling for the conclusion of the witness, and not for a statement of facts, it not being apparent what counsel means by “in the same manner”—what is included in that term.

A. Yes, sir; they drop down between the roller and the rope.

Mr. ACKER.—Counsel for defendants offers in evidence a photograph print to be attached to the print heretofore introduced for identification, the same being introduced at this time for identification in view of the objection of counsel to the written matter contained on the original.

Whereupon the further taking of these depositions was adjourned until 1:30 o'clock P. M., at the same place. [288]

On Monday, April 29th, 1912, at 1:30 o'clock P. M., the further taking of these depositions was resumed, pursuant to the adjournment.

[Deposition of T. C. Jameson, for Defendants.]

Whereupon T. C. JAMESON, a witness produced on behalf of the defendants, being first duly sworn according to law, testified as follows, to wit.

(Deposition of T. C. Jameson.)

Direct Examination.

(By Mr. ACKER.)

Q. 1. Please state your name, age, residence and occupation. A. Age, fifty; rancher, Corona.

Q. 2. Have you been at any time connected with the packing-house business? A. Yes, sir.

Q. 3. Please state when and where.

A. In Corona with W. H. Jameson, ever since his packing-house was built in 1898.

Q. 4. You have been associated with the Jameson packing-house ever since it was built?

A. Up till last November.

Q. 5. When you severed your connection?

A. Yes, sir.

Q. 6. What was your position in the packing-house?

A. When it originally started, I was my brother's representative. The Fay Company ran the house, and I was his representative, in the house. Later I was foreman of the house when he ran it himself.

Q. 7. From what time does your familiarity with the fruit [289] packing industry date?

A. From '98 continuously up to last November. For the last four or five years I have not had so much to do with the house proper, but have been there more or less.

Q. 8. From '98 up to last November, are you familiar with the machinery employed in the packing-house? A. Yes, sir.

Q. 9. Are you familiar with the machinery employed in the packing-houses for the sizing of fruit?

(Deposition of T. C. Jameson.)

A. Yes, sir.

Q. 10. Do you understand the operation of this machinery? A. Yes, sir.

Q. 11. Familiar generally with all classes of machinery related to the packing-house industry?

A. Yes, sir.

Q. 12. Can you state what form of machinery, if any at all, was employed in the packing-house at the time you became associated therewith, for the sizing or grading of fruit?

A. The only thing at that time that we had was a rope-and-roller grader.

Q. 13. What do you mean by a rope-and-roller-grader?

A. I mean a grader where the fruit is conveyed by a rope, and there are rollers parallel with the rope which conveyed the fruit, which turn away from the fruit and keep it turning all the way, and the rollers are different sizes so as to allow the fruit to drop through—the different sizes of fruit to drop through when they come to their proper openings, and the openings controlled by adjustments in the rollers, and the roller turns away from the belt that conveys the fruit. [290]

Q. 14. You have referred to said apparatus by the term rope-and-roller sizer. Was there any other name by which that sizer was known on the market at that time?

A. It was known as the California grader. The common term was rope-and-roller grader.

Q. 15. You state that the openings were controlled

(Deposition of T. C. Jameson.)

by the adjustments of the rollers. I now ask you to explain a little more specifically what you mean by "controlled by adjustment of the rollers."

A. There were castings which permitted of sliding out and enlarging the openings between the roller and the grader—and the rope—between the roller and the rope.

Q. 16. What time was that machine employed in connection with the packing-house?

A. It was employed continuously from, I think, about December, '98,—I can't tell you the exact month—it may be November. I don't know. From the latter part of 1898 until about a year and a half ago.

Q. 17. Was it in continuous use all that time?

A. Yes; it was in continuous use all that time. That is, there were some little alterations made in it, but it was in continuous use.

Q. 18. Did it successfully handle the grading or sizing of the fruit?

Mr. LYON.—Objected to as calling for the conclusion of the witness and not for a statement of fact.

A. Yes, sir.

Q. 19. (By Mr. ACKER.) Are you able to state whether that machine successfully handled the fruit that was packed in [291] your house?

A. Yes, sir.

Q. 20. Did it do so? A. Yes, sir.

Q. 21. Approximately what extent or quantity of fruit was sized or graded?

A. Well, we varied. We figured that we could

(Deposition of T. C. Jameson.)

pack a car and a half a day on it.

Q. 22. During the packing season?

A. Yes, sir.

Q. 23. How were the rollers of the sizer arranged?

You say you had adjustable rollers. How were the rollers arranged relative to the belt or rope that you refer to?

A. They were parallel to the belt, and were end to end.

Q. 24. What do you mean by the expression "end to end" as used in your last answer?

A. I mean that they butted up to each other and only were separated by the casting which controlled the adjustment.

Q. 25. By the casting which controlled the adjustment, do you mean the bearing of the rollers?

A. No; the casting controlled the bearing, but the casting was not the bearing. Well, it practically was part of the bearing.

Q. 26. Do you know whether or not the rollers were mounted in bearings?

A. They set in bearings. I don't know just how that expression "mounted in bearings"—they set in bearings.

Q. 27. Why did you discontinue the use of that machine a year or a year and a half ago as you have testified to? [292]

A. There were two reasons. One was that the machine was more or less worn out and the other reason was we wanted a larger capacity.

Q. 28. What machine did you install, if any at all,

(Deposition of T. C. Jameson.)

to take the place of the California sizer about which you have testified?

A. We installed a machine built by Mr. Parker.

Q. 29. So far as grading of the fruit is concerned, how did the sizing as carried out by the California sizer compare with the sizing as carried out on the Parker machine that you are now using?

Mr. LYON.—Objected to as indefinite and uncertain, in that it does not appear from the question what is meant by the term “character of sizing.”

A. We couldn't notice a great deal of difference.

Q. 30. (By Mr. ACKER.) I will ask you to examine a model which has been marked for identification, Mr. Jameson, and state, if you can, how the same compares with the sizer that you state was in use at your packing-house from 1898 up to a year or so ago? A. The principle was the same.

Q. 31. Asking you again to examine the model marked for identification, can you state whether the same discloses a fruit-grading machine having a runway formed of two parallel members?

Mr. LYON.—Objected to as calling for the conclusion of the witness and not the best evidence. The model speaks for itself.

Q. 32. (By Mr. ACKER.) Can you state whether the model discloses [293] one of those members as consisting of a series of end-to-end rollers?

Mr. LYON.—The same objection; and on the further ground that the term “end-to-end” as used in the question is indefinite and uncertain.

A. Yes, sir.

(Deposition of T. C. Jameson.)

Q. 33. (By Mr. ACKER.) Does the model disclose guides or brackets carrying the rolls?

Mr. LYON.—The same objection.

A. Yes, sir.

Q. 34. (By Mr. ACKER.) Does it disclose means for adjusting the brackets or guides?

Mr. LYON.—The same objection.

A. Yes, sir.

Q. 35. (By Mr. ACKER.) How do those parts compare with the co-operating parts of the California sizer used in your packing-house from 1898 as you have testified? A. Practically the same.

Q. 36. You are thoroughly familiar with the construction and operation of the device which was used in your packing-house from 1898 as testified to?

Mr. LYON.—Objected to as leading.

A. I certainly am.

Q. 37. (By Mr. ACKER.) Can you state, Mr. Jameson, whether that sizer as used in the packing-house from 1898, as testified to by you, was a fruit grader having a run-way formed of two parallel members, one of said members consisting of a series of end-to-end rolls, brackets carrying the rolls, guides for the brackets, and means for adjusting the brackets upon [294] the guides?

Mr. LYON.—Objected to as leading and not the proper method of proof, and incompetent and not the best evidence, and calling for the conclusion of the witness and not stating the facts.

A. Yes, sir.

Q. 38. (By Mr. ACKER.) How many of such

(Deposition of T. C. Jameson.)

sizers did you have in use in your packing-house during the times testified?

A. We had one at first, and later one and a half; what we called one and a half. In other words, a double one with two run-ways, and later one with one run-way.

Q. 39. By a double one, you mean a grader with two run-ways?

A. Yes, sir; a grader with two run-ways and later an additional one with only one run-way.

Q. 40. When was the additional one or the one with one run-way or the single grader installed?

A. 1903.

Q. 41. Was the machine which you had in use at your plant and known as the California grader, capable of handling the fruit to the same extent as you can handle fruit by the Parker grader which was installed?

Mr. LYON.—Objected to as leading and incompetent, calling for the conclusion of the witness and not for a statement of facts, and incompetent and no foundation laid.

A. I can't answer that absolutely to my own knowledge.

Q. 42. (By Mr. ACKER.) I call your attention to this exhibit, photo Upland sizer, introduced in evidence, and ask you to state how the device disclosed thereby compared with the California sizer as used in your packing-house during the [295] time specified.

Mr. LYON.—Objected to as incompetent and not

(Deposition of T. C. Jameson.)

the best evidence, and not the proper method of proof.

A. Apparently identical.

Q. 43. (By Mr. ACKER.) Is that California sizer which you have testified to as having been used in your packing-house, in existence to your knowledge at the present time? A. I can't say.

Q. 44. You have no knowledge one way or the other? A. No, sir.

Q. 45. How was the rope member of that sizer sustained, Mr. Jameson?

A. It was over two pulleys, at either end of the machine, and ran along a groove on the upper end and hung loose over the pulley at the lower end.

Q. 46. That is, I understand you, it ran through a grooved guide? Did or did not the rope constitute the propelling element or member of the grader?

Mr. LYON.—Objected to as leading.

A. The rope conveyed the fruit, as I stated in my original statement.

Q. 47. (By Mr. ACKER.) Can you state whether or not the run-way of the grader was an open one?

A. Yes, sir; it was open.

Q. 48. What was the purpose of the provision which was provided for adjustment of the grading rolls toward and from the rope member of the grader?

Mr. LYON.—Objected to as incompetent, no foundation laid, the witness not having qualified to answer the question, and [296] it not appearing

(Deposition of T. C. Jameson.)

that he had anything to do with the manufacture of the machine or the installation thereof.

Q. 49. (By Mr. ACKER.) Did you not state that you had control of the operation of these machines?

A. Yes, sir. To enlarge or diminish the opening between the rollers and the rope, so as to control the sizes.

Q. 50. Can you state whether or not the California sizer of the type which you have testified to was a well-known sizer in use in this market or in the packing-houses?

A. I know of several packing-houses at that time when I started—at the time I spoke of—and I knew of no other grader at that time.

Q. 51. What packing-houses, for instance?

A. Well, the packing-house of the Sunset Fruit Company of Corona, especially. I can't recall any others definitely. It was then known as the Queen Colony.

Q. 52. Where is the packing-house of W. H. Jameson located? A. Located at Corona.

Q. 53. Did you operate personally these machines in the packing-house? A. I did.

Q. 54. From 1898, as I understand?

A. From 1898—I can't give you the exact time when I ceased personal supervision of the house proper. I can't give the exact date of that. It was for a number of years.

Q. 55. And those California graders, starting first with the double grader and then the double grader assisted by the single grader, took care of the entire

(Deposition of T. C. Jameson.)

pack of the house, or the sizing of the fruit during the times you have mentioned? [297]

A. Yes, sir.

Cross-examination.

(By Mr. LYON.)

Q. 56. You say you are now using a Parker grader in the Jameson packing-house?

A. Yes, sir.

Q. 57. Built by George D. Parker of Riverside?

A. Yes, sir.

Q. 58. You have been notified that the same is claimed to be an infringement of the Robert Strain reissue patent, owned by Mr. Stebler?

A. I have not been personally notified of that.

Q. 59. Your concern has?

A. I am not sure of that. I have so understood. I don't know it of my own personal knowledge.

Q. 60. And you understand that that is the machine that is involved in this litigation?

A. Yes, sir.

Q. 61. And that if a decree is rendered in favor of Mr. Stebler in this suit, your company will be liable for infringement of the same patent?

A. I am not in the company now. I have nothing to do with it.

Q. 62. This Sunset or Queen Colony grader, did it have one long roller in one piece, or was it also made up in sections like the model?

Mr. ACKER.—I object to the expression "section" as employed by counsel, unless he explains to the witness what he [298] means by sections.

(Deposition of T. C. Jameson.)

Q. 63. (By Mr. LYON.) The model before you marked "Model California sizer" has a roller member on each side of the run-way or double run-way made up of three wooden sections, has it not?

A. Yes, sir.

Q. 64. Was the grader which you first used in 1898 or thereabouts composed of three similar wooden sections? A. No, sir.

Q. 65. How many? A. Two on each side.

Q. 66. And how many steps were there on each of those rollers or sections?

A. My impression is that there were four.

Q. 67. And you could adjust the whole roller toward or away from the rope, could you not?

A. The whole roller or the whole section? Which do you mean?

Q. 68. The whole roller.

A. We could adjust each section or the two sections as one.

Q. 69. You could not adjust any one of the four stepped portions of the section with respect to the section next to it of that roller, could you?

A. No.

Q. 70. In other words, you could not get an individual adjustment for each individual grade?

A. No, sir.

Q. 71. In 1903, from whom did you get this single or one run-way grader? [299]

A. We built it ourselves. That is, we had a man employed and it was done by day labor.

Q. 72. After you had used what you call rope-and-

(Deposition of T. C. Jameson.)

roller graders or the double grader with two sections having four steps on each section, as you say, did you not lengthen that grader out by adding further sections to it? A. Yes, sir.

Q. 73. How many sections did you add to it?

A. We added two more sections to each side, so that each side had four sections instead of two.

Q. 74. And you connected it in the same manner?

A. Yes, sir.

Q. 75. When was that done?

A. That was done in 1903.

Q. 76. Each one of those sections was a stepped roller? A. Well,—

Q. 77. I mean by “stepped,” having four portions of different diameters.

A. In the rebuilt one, do you mean?

Q. 78. Yes. A. No.

Q. 79. How many sections? A. Two sections.

Q. 80. What did you do with the rollers that were in the original machine?

A. I think I used them for firewood.

Q. 81. Will you look at the bracket supporting the sections of the wooden rollers in this model marked here “California sizer,” and state whether or not those brackets are [300] the same as were used by the Jameson packing-house.

A. Yes; practically the same.

Redirect Examination.

(By Mr. ACKER.)

Q. 82. Mr. Jameson, when you used the expression

(Deposition of T. C. Jameson.)

“sections” in reply to a question of counsel, did you mean the same parts heretofore referred to as end-to-end rollers? A. Yes, sir. [301]

[Deposition of F. K. Adams, for Defendants.]

F. K. ADAMS, a witness produced on behalf of the defendants, being first duly sworn, according to law, testified as follows, to wit:

Direct Examination.

(By Mr. ACKER.)

Q. 1. State your name, age, residence and occupation.

A. Fifty-eight years of age; my legal residence is Los Angeles. That is where I vote. My occupation is manager of packing-house.

Q. 2. Of what packing-house?

A. West Ontario Citrus Association of Narod.

Q. 3. How long have you been manager of said association?

A. Two years and a half for that association.

Q. 4. What was your occupation prior to the management of the West Ontario Citrus Association?

A. For two years and a half prior to that I was in the real estate business.

Q. 5. And prior to that?

A. Seven years I was manager of the Pomona Fruit Growers' Exchange, and two years assistant manager of the Pomona Fruit Growers' Exchange.

Q. 6. When did you become identified with the Pomona Fruit Growers' Association? What year?

A. In 1906, I think it was.

(Deposition of F. K. Adams.)

Q. 7. Are you familiar with the fruit industry in the southern portion of the state? A. Yes, sir.

Q. 8. Are you familiar with the machinery used in connection [302] with the fruit industry in this State? A. Yes, sir.

Q. 9. Are you familiar with that class of machinery known as sizers of fruit? A. Yes, sir.

Q. 10. What experience have you had in connection with sizers of fruit?

A. During the twelve years of my work in packing-houses I have used them constantly.

Q. 11. Using them in what packing-house?

A. In the Fruit Growers' Exchange packing-house and the West Ontario Citrus Association packing-house.

Q. 12. What type of sizer was used in the Pomona packing-house?

A. During the time I was there the California grader.

Q. 13. What do you mean by California grader?

A. It is a sizer consisting of a rope running in a groove to carry the fruit forward, and two or three rollers running parallel with that, with steps on them, making the different sizes.

Q. 14. How were the rollers arranged relative to each other?

A. Abutting on one another at the ends.

Q. 15. That is, the ends of adjacent rollers abutted?

A. Well, practically so. There was perhaps a quarter of an inch for adjustment, but they were

(Deposition of F. K. Adams.)

practically close together.

Q. 16. What do you mean by "for adjustment"?

A. A little variation in the length of the roller for a [303] new roller to be placed in. But it was practically close together, so that the fruit would not catch on any division between two rollers.

Q. 17. Where and when was that type of machine first used to your knowledge?

A. I commenced using them in 1906.

Q. 18. 1906? A. 1896, I mean.

Q. 19. Where? At what house?

A. The Pomona Fruit Growers' Exchange packing-house.

Q. 20. Did you have charge of the machine?

A. Not the first two years. I worked it a great deal myself, but I was assistant manager and did not have charge at that time. It ran by foot-power and I did a good deal of running it myself.

Q. 21. That was the first couple of years?

A. Yes, sir.

Q. 22. How about after that?

A. After that I had entire charge of the house and all machinery.

Q. 23. And you are thoroughly conversant with that machine? A. Yes, sir.

Q. 24. Was it in continuous use as a sizer by the packing-house?

A. It was during the nine years that I was in the house to my knowledge.

Q. 25. Dating from the year 1896?

A. Until 1905.

(Deposition of F. K. Adams.)

Q. 26. Can you state whether it was a successful machine [304] in its operation, as far as related to the grading of fruit or the sizing of fruit?

Mr. LYON.—Objected to as leading and calling for the conclusion of the witness, and not for a statement of fact.

A. Relatively speaking, it was successful. It was the best at that time in the market.

Q. 27. (By Mr. ACKER.) And handled the fruit during those years? A. Fairly well; yes.

Q. 28. I call your attention to a model marked for identification, and ask you to examine the same and state how it compares with the device you have stated was used in the Pomona packing-house from 1896.

Mr. LYON.—Objected to as incompetent and not the best evidence, no foundation laid for the introduction of secondary evidence, and as incompetent, no foundation laid, the witness not having qualified to answer the question.

A. The one that was put in in 1896 consisted of only two rollers on a side. The one that was put in later had the three rollers. Aside from that, this is practically a model of the sizer.

Q. 29. (By Mr. ACKER.) That is, practically a model of the sizer that was used in the Pomona packing-house under your supervision?

Mr. LYON.—The same objection.

A. Yes, sir.

Q. 30. (By Mr. ACKER.) How many of those sizers did you have in the packing-house, if more than one? A. Two. [305]

(Deposition of F. K. Adams.)

Q. 31. Are those sizers in use at the present time?

A. One of them is.

Q. 32. What other form of sizer have you in use in the packing-house at this time?

A. What we commonly speak of as the Stebler sizer and the Parker sizer.

Q. 33. I direct your attention to a photograph which has been introduced as Defendants' Exhibit Photo of the Upland Sizer, and ask you to state how that compares with the machine you have referred to as the California sizer.

Mr. LYON.—Objected to as leading, incompetent, not the best evidence, no foundation laid for the introduction of secondary evidence, and as calling for a conclusion of the witness and not a statement of facts, and the witness not having qualified to answer the question.

A. The photograph is a little misleading. I take it that this is in three sections with the steps the same as that is. It has the appearance of the rollers being the same size in the photograph. But I take it that it is probably in steps the same as that. Otherwise the general construction of the machine is identical with the second one that I referred to. I should judge that it is simply due to the perspective on which the photograph is taken.

Q. 34. (By Mr. ACKER.) What composed the inner member of the grader?

A. A rope rolling in a groove.

Q. 35. What composed the opening member of the grader?

(Deposition of F. K. Adams.)

A. In the first one two rollers end-to-end, and in the second one three rollers the same as the model.

[306]

Q. 36. Was there any provision made for varying the size of the apertures for the sizing of the fruit?

A. Adjustable by brackets.

Q. 37. When you say "adjustable," do you mean the rollers were adjustable?

A. The rollers were adjustable; yes, sir.

Q. 38. I understand you to state that the rollers were mounted end-to-end?

A. They were end-to-end, yes, sir.

Cross-examination.

(By Mr. LYON.)

Q. 39. You say one of these California graders is still in use at the present time? A. Yes, sir.

Q. 40. For what purpose? A. Grading fruit.

Q. 41. Where did you procure that particular grader? A. I can't say.

Q. 42. To refresh your recollection, is it not a fact that you procured that grader from Stebler & Gamble of Riverside, California?

A. I don't recall where it was purchased.

Q. 43. One of the graders that you have referred to as the California graders was secured from Mr. Fred Stebler's firm at Riverside, was it not?

A. I don't know.

Q. 44. You mean that you can't remember?

A. I don't remember. [307]

Q. 45. When did you get the first one of those graders?

(Deposition of F. K. Adams.)

A. In the fall or early winter of 1896. That winter of that season of 1896-7.

Q. 46. From whom?

A. That was bought in San Francisco. I don't recall the name of the concern.

Q. 47. I believe that association is using two of Mr. Stebler's sizers and one of the Parker sizers.

A. The association that I am connected with, yes, sir. But that association used the Pomona sizer.

Q. 48. Do you know what the Pomona Association is using at the present time?

A. They are using that one old California sizer. What the balance of their outfit is, I am not prepared to say.

Q. 49. When did you last see this sizer?

A. This morning.

Q. 50. And it was in use? A. Yes, sir.

Q. 51. You did not take the pains to notice what other sizers they had in that packing-house?

A. No, I did not.

Q. 52. Do you know whether they have more than the one? A. I know they have six.

Q. 53. Isn't it a fact that the other five are Stebler sizers?

A. I can't say of my own knowledge whether they are all Stebler sizers.

Q. 54. Part of them were?

A. Part of them are. [308]

Q. 55. And in each one of those Stebler sizers each roll is individually adjustable toward and from the longitudinal moving rope, is it not?

(Deposition of F. K. Adams.)

A. I can't say as to the details of their sizers. I simply take it for granted that they are like mine. But I never used those sizers in that house.

Q. 56. If they are like yours, they are as set forth in my last question? A. Yes.

Q. 57. Now, in these old California sizers you say that the roller member of the run-way was made up of three rollers or sections? Is that true?

A. Three rollers; yes, sir.

Q. 58. Was each one of those sections or rollers the same diameter throughout its length?

A. No, sir.

Q. 59. Describe each one of those sections.

A. They consisted of—we call them steps, beginning with the largest and dropping an eighth of an inch or a quarter of an inch in diameter, for each size.

Q. 60. How many steps were there on each one of those sections or rollers? I am referring now to the graders or sizers which you have called the California sizer, and used by you from 1897 to 1906.

A. On one sizer I think there were five steps on each, but I am not positive whether it was four or five. We packed about eight or ten sizes, and there was one to each size. On the second one that we bought, of which this is a model, there were three to each roller. [309]

Q. 61. When you say in your last answer "of which this is a model," you refer to the model California sizer which is before you?

A. Yes, sir.

(Deposition of F. K. Adams.)

Q. 62. It is a fact, is it not, Mr. Adams, that in the California sizers referred to by you, if you adjusted one of those sections or rollers, as you seem to prefer to term them, toward or away from the rope or travelling belt, you adjusted each one of the openings formed by the several steps of that section or roller, did you not?

A. Adjusted one end of each roller.

Q. 63. And it was not possible to adjust each individual size separately, was it? A. No, sir.

Q. 64. The roller or sections of roller, whichever way you prefer to term it, which was nearest the receiving end of the grader, had all of its steps of larger diameter than the first step of the next succeeding roller or section, did it not?

A. Yes, sir.

Q. 65. So that it was tapered down by these graduated steps to the end of the machine?

A. Yes, sir.

Q. 66. You say you are now using two of the Stebler machines? A. Yes, sir.

Q. 67. And one of Parker's machines?

A. Yes, sir.

Q. 68. From whom did you get the Parker machine?

A. The Parker Machine Works at Riverside.

Q. 69. Your company has been notified that Mr. Stebler [310] claims that such machine is an infringement of his patent, has it not?

A. Yes, sir.

Q. 70. You are using that machine without any

(Deposition of F. K. Adams.)

license or consent from Mr. Stebler?

Mr. ACKER.—To which we object as immaterial whether he is using it with or without Mr. Stebler's license.

A. As a matter of fact, we are not using it now, because we don't need it. We are only using two sizers, but that is a simple matter of convenience.

Q. 71. (By Mr. LYON.) But you have it?

A. Yes, sir. If we used three we would use that.

Q. 72. You are using two Stebler sizers?

A. Yes, sir; it is simply a matter of convenience, running two sizers—two grades of fruit.

Q. 73. By using the word "grade" in your last answer, you refer rather to quality than to size?

A. Yes, sir; quality.

Q. 74. Do you know what became of the other of these California sizers than the one which you say now was in use by the Pomona Fruit Growers' Association?

A. I don't know. I saw it about six weeks ago. I don't know what became of it.

Q. 75. Do you mean to be understood as saying, Mr. Adams, that each one of these sections or rollers as you have termed them, in the old California grader as used by you, could be adjusted toward and away from the rope without affecting in any manner the adjacent roller or section?

A. The answer I believe I gave was that you could adjust [311] at one end of the two rollers.

Q. 76. That would throw both of these rollers somewhat out of parallel?

(Deposition of F. K. Adams.)

A. It could not have been used only as you adjusted the other end of the roller.

Q. 77. In other words, in a practical sense you had to adjust the roller side of the grader as a whole?

A. If I may be allowed to point to this, if we simply adjusted here it threw the whole thing out of alignment.

Mr. LYON.—The witness places his hand upon the bracket between the rollers or sections of roll near the receiving end of the model.

Mr. ACKER.—I would modify that a little. The witness places his finger on the bracket interposed between the lower end of the first roll and the upper end of the second roll of the series of rolls on the model of the California sizer.

Mr. LYON.—That is all right.

Q. 78. And what would be the effect of throwing the whole roller out of alignment?

A. It would not properly size the fruit.

Q. 79. That would not be practical in practical operation of the machine?

A. I don't know just what you mean by that question.

Q. 80. I mean it would not be practical to so adjust, as you have indicated, one of these brackets, if you desire to secure the proper sizing of the fruit?

A. It would not be practical. You would have to adjust all the brackets. If you adjust one you have to adjust them all.

Q. 81. Of that one roll? [312]

A. That one side of the sizer.

(Deposition of F. K. Adams.)

Redirect Examination.

(By Mr. ACKER.)

Q. 82. Suppose I adjust it from the forward bracket, referring now to the model California sizer, sustaining the upper end of the first roll. Would I have to change the adjustment of all the subsequent brackets?

A. Not necessarily. It would depend on what you wanted to accomplish. If there were small sizers—if you simply wanted to change the size of your small sizes, you would simply adjust it at that end and accomplish it.

Q. 83. Has your testimony in any manner been influenced by reason of the fact that you are using a Parker sizer and that your company has been notified, as I understand, that the Parker sizer is an infringement of the Stebler sizer? A. No, sir.

Recross-examination.

(By Mr. LYON.)

Q. 84. In the grading of fruit upon what you have termed the old California grader which you have explained to us, as used by you from 1896 to 1906, would it be possible to adjust one size of fruit upon that grader without changing the adjacent size?

A. Not entirely.

Q. 85. That has been found to be an advantageous thing to do, has it not, to adjust each size separately?

A. It is an advantage; yes, sir. [313]

[Deposition of F. E. Proud, for Defendants.]

F. E. PROUD, a witness produced on behalf of the defendants, being first duly sworn according to law, testified as follows, to wit:

Direct Examination.

(By Mr. ACKER.)

Q. 1. State your name, age, residence and occupation.

A. F. E. Proud; I live at La Habra; I am a rancher.

Q. 2. What business are you engaged in at the present time? A. Ranching and fruit growing.

Q. 3. What time have you been engaged in ranching business? A. A little over eight years.

Q. 4. Are you familiar with the machinery used in connection with the fruit industry, more especially to packing-houses? A. I am.

Q. 5. How long have you been familiar with that class of machinery? A. Since 1890.

Q. 6. Are you familiar with what is known as sizing machinery for fruit? A. Yes, sir.

Q. 7. Over what length of time has your knowledge and experience extended with sizers?

A. Thirteen years.

Q. 8. Are you familiar with the machinery for the sizing of fruit, more particularly for oranges, as used in packing-houses throughout Southern California? A. Yes, sir.

Q. 9. Can you state the various types of sizers which have [314] been in use during the past

(Deposition of F. E. Proud.)

thirteen years you have been conversant with the industry?

A. Yes, sir. The first grader we used was known as the California grader for grading oranges, consisting of two members; with one belt running in a groove and a series of end-to-end rollers running parallel with it; and the rollers were set on bearings; being movable from the belt and adjustable from the belt.

Q. 10. Are you familiar with the construction of the machine, so far as operation?

Mr. LYON.—Do you want that answer to stand, that you are only familiar with one?

A. If he wants more, I can tell him more.

Q. 11. (By Mr. ACKER.) Give the others.

A. We used the double-rope grader with a rope on each side, setting close together at one end and got wider, and ran the same distance and the same direction, and whenever it got wide enough for them to fall through they fell through, I don't remember what they call that grader now.

Q. 12. Do you mean the double-rope grader?

A. Yes, sir; we use it more for lemons than anything else, because a lemon generally sets up end-ways, and they were the only grader that graded lemons to do any good much.

Q. 13. Any others?

A. That is the only kind that I used. I have seen others.

Q. 14. You say you have used the two forms of graders that you testify to? A. Yes, sir.

(Deposition of F. E. Proud.)

Q. 15. Were you engaged in the packing-house business? [315] A. Yes, sir.

Q. 16. When and where?

A. I was in Orange, in the Parker packing-house; foreman of the house for ten years.

Q. 17. Dating from when?

A. From 1893 to 1903.

Q. 18. What form of sizer was used in the Parker packing-house?

A. We had a California grader, the same as I described—the first one.

Q. 19. When was that grader first put into use in the Parker packing-house, to your knowledge?

A. It was there when I went in there.

Q. 20. That was in 1893?

A. No; the house ran before that—before I went in there. I can't say just when it was put in.

Q. 21. Was it in use at the time you took employment with the Parker packing-house?

A. Yes, sir.

Q. 22. That was the year 1893? A. Yes, sir.

Q. 23. For what length of time was the sizer used in the Parker packing-house?

A. It is still there; they are using it yet. It has been there to my certain knowledge since 1893. No, it was used before that, but I can't say how long.

Q. 24. Please describe fully the construction of that sizer.

A. Well, it was a sizer just like the one on the table, [316] excepting that it had two rolls on a side instead of three. This one has three, I see.

(Deposition of F. E. Proud.)

Q. 25. You are referring to this model California sizer? A. Yes, sir.

Q. 26. You say it was the same as that model except two rollers on each side instead of three?

A. Yes, sir.

Q. 27. And that machine was in use up to what time? A. It is in use now?

Q. 28. At the present time?

A. One of them is. There are two of them there.

Q. 29. And has been used since 1893 to your knowledge? A. Yes, sir.

Q. 30. Did you have anything to do with the operation of that machine? A. Yes, sir.

Q. 31. What were your duties in connection with it?

A. I was foreman of the house and I looked after it in every way. In fact, I rebuilt one of them.

Q. 32. What do you mean by you rebuilt one of them, and when did you rebuild it?

A. In 1900. I lengthened it out and made it much longer than it was.

Q. 33. What do you mean by saying that you made it much longer?

A. I added more rollers to it and made the distance—made these distances longer. For instance, these are only four or five inches, and I made them a foot or more or eighteen or twenty inches, or something like that. It gave more [317] grading space and gave more bin space for the packers; more room for the packer.

Q. 34. Were there any provisions provided in that

(Deposition of F. E. Proud.)

early grader or sizer—that is, before it was rebuilt by you—whereby the grades or sizes of the fruits could be varied—the grade apertures for the fruit could be varied?

Mr. LYON.—Objected to as leading.

A. The same as I said before; it was adjustable in the bearings.

Q. 35. (By Mr. ACKER.) That is, adjustable relative to its opposing member?

A. Yes, sir.

Q. 36. In what direction?

A. From or to, as you might move it.

Q. 37. Transverse to the machine or longitudinally with the machine? A. Lengthwise.

Q. 38. Show me by the model.

A. If you wanted your fruit larger, all you had to do was to loosen the screw and let it out this way. That would let the larger oranges pass through up here. It would give more room between the roller and rope.

Q. 39. That is, you moved it toward or from the rope? A. Yes, sir.

Q. 40. How were the rollers of the sizer that was used in '93 when you entered the employ of the Parker packing-house, arranged relative to each other? A. End to end.

Q. 41. What do you mean by “end-to-end”? [318]

A. I mean they came together—the ends of them—the same as that one.

Q. 42. That is, you mean that the ends of adjacent rollers abutted substantially?

(Deposition of F. E. Proud.)

Mr. LYON.—Objected to as leading?

A. They are; yes, sir.

Q. 43. (By Mr. ACKER.) Can you state whether that machine was a successful operative machine for the sizing of fruit?

Mr. LYON.—Objected to as leading and suggestive of the answer.

A. It was a successful grader, yes, sir.

Q. 44. (By Mr. ACKER.) What do you mean by “a successful grader”?

A. I mean that it did the work required to do, and was used for a great many years and no fault was found with it.

Q. 45. Did you have charge of that machine?

A. Yes, sir.

Q. 46. I hand you two photographs, Mr. Proud, and ask you to examine the same and state, if you can, what they relate to and whether you can identify them in any manner.

Mr. LYON.—Objected to as incompetent, no foundation laid, the witness not having qualified to answer the question.

A. Yes, sir; I have seen that grader before.

Q. 47. (By Mr. ACKER.) You say you have seen this grader before? What do you mean?

A. That is one of the graders that I rebuilt.

Q. 48. Rebuilt for what house?

A. Jameson's at Corona.

Q. 49. How many grading sizing rollers are disclosed by the [319] photographic print?

A. I think this grader had nine sizes on.

(Deposition of F. E. Proud.)

Mr. LYON.—I call counsel's attention to the fact that the witness has not answered the question.

Q. 50. (By Mr. ACKER.) What do you mean by nine sizes?

A. I mean that it had nine different sizes of oranges. Graded that many sizes.

Q. 51. How many grading rollers are disclosed by the print?

A. Four rollers on a side, if I am not mistaken; possibly five. It has been some time since I have seen that. There were two sizes on a roll. Probably there was one had three. I can't say whether one had three or one had one. Perhaps it shows there on the photo.

Q. 52. Do I understand you to state that the sizer employed in the Parker packing-house in 1893 was the same as the grader illustrated by the model California sizer, with the exception that it had two end-to-end rollers instead of three? A. Yes, sir.

Q. 53. In the reconstructing of that machine, what was necessary or what work was performed by you?

A. Simply lengthened it out. I didn't change it in any way, any more than we wanted more bin room to get on more packers, and in order to do it we had to have a longer grader.

Q. 54. What was the length of the grader before being reconstructed by you?

A. About eight feet.

Q. 55. How long was the grader after it was reconstructed by you?

(Deposition of F. E. Proud.)

A. Eighteen or twenty feet; I can't say exactly.
[320]

Q. 56. What change was made in the grader, if any, other than lengthening the rolls?

A. There was no change made in the principle. We attached power to it instead of running it by hand. It originally was run by a foot-treadle, and we put a power attachment to it.

Q. 57. How did it conform when reconstructed by you to the roller grader, so far as taking care of the sizes of fruit that passed over the same?

A. The same thing exactly.

Q. 58. Operated in the same manner?

A. Yes, sir.

Q. 59. Did it operate in the manner set forth in the model California grader before you?

Mr. LYON.—Objected to as incompetent, no foundation laid, the witness not having qualified to answer the question.

A. Yes, sir.

Q. 60. (By Mr. ACKER.) When did you say the machine was reconstructed by you?

A. 1890—no, 1900.

Q. 61. As I understand from your testimony, it ran from '93 up to 1900 in its original condition?

A. Yes, sir.

Q. 62. How many of those graders were in use in the Parker packing-house? A. Two.

Q. 63. Was the California grader, as testified to by you, a well-known form of grader in this market?

A. Yes, sir.

Q. 64. Was it used extensively? [321]

(Deposition of F. E. Proud.)

A. Yes, sir.

Q. 65. Does your acquaintance with it date from 1893?

A. I was acquainted with it before that, but that was when I went into that particular house.

Q. 66. Do you know of any other houses in which it was used? A. Yes, sir.

Q. 67. What houses?

A. It was used in two other houses right there in Orange, known as the Spencer house at present. One of the oldest houses in town.

Q. 68. When was it in use in that house?

A. Well, it was several years prior to 1893. I can't say exactly how long.

Q. 69. Then does your knowledge and acquaintance with this type of grader extend from 1890?

Mr. LYON.—Objected to as leading.

A. Yes, sir; as far back as that anyway.

Q. 70. (By Mr. ACKER.) But you did not take charge of the machines, I understand, until 1893?

A. No, sir.

Q. 71. Did you ever build any of those graders in their entirety? A. No, sir.

Q. 72. Can you state whether that roller machine was a fruit-grading machine having a run-way formed of two parallel members, one of said members consisting of a series of end-to-end rolls, brackets carrying the rolls, guides for the brackets and means for adjusting the brackets upon the guides?

Mr. LYON.—Objected to as leading and calling for the [322] conclusion of the witness, incompe-

(Deposition of F. E. Proud.)

tent, and not the best evidence.

A. That is what I stated, I think, in answer to your first questions, that it was.

Q. 73. (By Mr. ACKER.) Then it did contain that combination of elements?

Mr. LYON.—The same objection.

A. Yes.

Q. 74. (By Mr. ACKER.) Was the grader to which you have testified what was known as a double grader? A. Yes, sir.

Q. 75. In what did the traveling member of the grader work? A. A belt in a groove.

Q. 76. Please examine the model of the California grader before you and state whether you find in said model such a form of means of supporting the belt.

A. Yes, sir; there is the groove for the belt to run in.

Q. 77. And was it constructed in that manner?

A. Yes, sir.

Q. 78. Were the rollers that you have testified to as being end to end, supported in any manner?

A. They were, yes, sir.

Q. 79. On what?

A. Supported on brackets or bearings, as I call them.

Q. 80. Bearing brackets? A. Yes, sir.

Q. 81. And were provisions made—

A. For adjustment, yes. They were made to move to and from the belt. [323]

Q. 82. What was the purpose of that adjustment?

A. To give the right size of orange; to grade right.

(Deposition of F. E. Proud.)

Q. 83. Were changes in adjustment made frequently?

A. Not very, no. Different varieties of oranges are of different shape. Sweets are long oranges and we have to close it up a little. If we were packing round oranges we would have to open it up a little.

Q. 84. As I understand, an initial adjustment is given for each class of fruit? A. Yes, sir.

Q. 85. And does that adjustment ordinarily hold throughout the run of that class of fruit?

A. Yes, sir.

Q. 86. Are you familiar with the grader in use and known as the Stebler grader? A. Yes, sir.

Q. 87. So far as relates to the grading or sizing of fruit, how did the grader that you have referred to as having been in use in 1893 at the Parker packing-house, compare to the grading of the fruit in the Stebler machine?

Mr. LYON.—Objected to as incompetent, calling for the conclusion of the witness and not for a statement of facts. And the question is further objected to in that it is indefinite, it not appearing therefrom what is meant by the term “grading or sizing of fruit.”

A. It is the same principle as this one.

Q. 88. (By Mr. ACKER.) What do you mean by “this one”?

A. This California grader here that I have described before as the one I have been using since 1890. [324]

Q. 89. Would there be any change affected in the

(Deposition of F. E. Proud.)

grading operation by reason of the extensions which you made to the grading apparatus?

A. None at all.

Q. 90. So far as the operation of the grading features is concerned, does it make any difference whether it is a power-driven apparatus or a foot-actuated apparatus or hand-actuated device?

A. Not a particle of difference.

Q. 91. It operates just in the same manner?

A. Yes, sir.

Q. 92. Did I understand you to state that you had made some repair work in the Jameson house?

A. Yes, sir.

Q. 93. What was the nature of that work and when was it performed?

A. I rebuilt one of these California graders in 1901. I simply lengthened it out the same as I described before.

Q. 94. When you say "rebuilt" you mean added additional rollers? A. Yes; made them longer.

Q. 95. And did that change only go to increasing the capacity of the machine?

A. It did not increase the capacity of the machine. It increased the number of packers you could put on the machine.

Q. 96. That is, you could employ a greater number of packers with the machine in its lengthened condition than when it was shortened up?

A. Yes, sir; we had more bin-room. [325]

Q. 97. And that was brought about by the increase of the length of the rolls? A. Yes, sir.

(Deposition of F. E. Proud.)

Q. 98. What type of machine or what was the machine that was employed in the Jameson packing-house at the time you added to the grader as you have testified to?

A. It was a California grader; two rolls on each side.

Q. 99. You say you had two rolls on each side. How were those rollers arranged relative to each other?

A. End to end, the same as the model.

Q. 100. How were the other parts arranged relative to the rollers? A. Exactly the same as this.

Q. 101. You mean by that this model California grader? A. Yes, sir.

Q. 102. Do you know whether or not that grader was extensively used in the section of the country?

A. I do. It was.

Q. 103. Do you know whether it is being used to-day in any other place than the Parker packing-house?

A. It has not been very long since I have seen some of them. I can't say whether they are in use to-day or not.

Q. 104. Where did you see them, Mr. Proud?

A. There was one in Fullerton.

Q. 105. What do you mean by Fullerton?

A. The town of Fullerton.

Q. 106. In a packing-house?

A. The Benchley packing-house.

Q. 107. Don't you know it is in use as a matter of fact in [326] the Benchly packing-house at the

(Deposition of F. E. Proud.)

present time? A. Yes, sir, it is.

Q. 108. Do you know of any other packing-house where it is being used at the present time?

A. None except the Parker, no,—in Orange.

Q. 109. I hand you a photograph and ask you to examine the same and state whether you can identify the same in any manner whatsoever. Examine that and state if you can identify the photograph and the machine as one which you are conversant with.

A. It is the same thing. I don't know if it is the same machine. It is exactly the same principle. The same kind of machine. I don't know whether I ever saw that particular machine or not.

Q. 110. You mean by "the same thing" what?

A. It is a machine with the two rolls on each side, the same as I built for Jameson.

Q. 111. How does it compare with the device that was in use at the Parker packing-house?

A. It is identically the same thing.

Mr. ACKER.—I introduce the print in evidence and ask that the same be marked as Defendant's Photo of Parker early roll machine.

Mr. LYON.—Objected to as incompetent and no foundation laid.

Q. 112. (By Mr. ACKER.) When you used the name "Parker packing-house" have you any reference to Mr. Parker who is a party defendant to the present action? A. No, sir. [327]

Q. 113. Where is the Parker packing-house located? A. Orange, Orange County, California.

(Deposition of F. E. Proud.)

Cross-examination.

(By Mr. LYON.)

Q. 114. You say that one of these California graders is now in use in the Benchly packing-house at Fullerton, California?

A. That is what I said, but I think, if I am not mistaken,—I might possibly be mistaken on that—I thought that I said it, that it might be possible that it was not in use there. I was in the house about a month ago.

Q. 115. Where is that house located?

A. In Fullerton.

Q. 116. Whereabouts in Fullerton?

A. Just west of the depot.

Q. 117. Which side of the track?

A. On the north side.

Q. 118. What other kind of grader did they have in that packing-house at that time?

A. I don't remember that. I wouldn't remember this one, only I was on the side where they had this little short grader for grading one grade of fruit. To the best of my recollection it was a California grader. I might possibly be mistaken.

Q. 119. With a single roller, wasn't it?

A. I think so.

Q. 120. A short machine about eight feet long?

A. Yes, sir.

Q. 121. Are you positive that that was not in the Placentia packing-house at Fullerton instead of the Benchly packing-house? [328]

A. If it was, it was one that was run by Benchly,

(Deposition of F. E. Proud.)

anyway. I think it was called the Benchly Fruit Company.

Q. 122. There is a Placentia packing-house at Fullerton distinct from the Benchly packing-house?

A. Yes, sir.

Q. 123. Do you know who put in that California grader at the Benchly packing-house?

A. I do not.

Q. 124. You didn't examine the grader to see if there was any name there?

A. No, sir. If I had examined it I would have been able to state a little plainer.

Q. 125. You have been familiar with this California grader in use since 1890, Mr. Proud?

A. Yes, sir.

Q. 126. Are you not mistaken as to that date?

A. Not at all.

Q. 127. How do you fix it?

A. I know when I commenced working in that house, and I know I worked in another house prior to that where they had a grader.

Q. 128. To refresh your recollection, I will ask you if you don't know that the California grader was manufactured under a patent issued to James T. Ish, and owned by a San Francisco party?

A. No; I don't know that to be a fact.

Q. 129. If I were to call your attention to said patent and show that it was not issued until 1891, would this enable you to refresh your recollection as to when you first saw that [329] grader?

A. No, sir.

(Deposition of F. E. Proud.)

Q. 130. You are relying entirely upon your recollection as to the date? A. Yes, sir.

Q. 131. What date was it that you lengthened out the grader for Jameson at Corona? A. 1901.

Q. 132. To what extent have you been engaged in fruit-packing business? Give us a detailed history of your connection with it.

A. I have been in the business in that one house for ten years as foreman of the house.

Q. 133. That is, the Parker? A. Yes, sir.

Q. 134. When did you leave the Parker house?

A. In 1903.

Q. 135. And then what did you do?

A. I went to the ranch.

Q. 136. What was your next connection with the use or building of fruit graders?

A. I have not used any since.

Q. 137. What was the occasion of your remodeling or rebuilding or lengthening out the Jameson grader at Corona?

A. Well, Mr. Jameson saw the one that I fixed for Parker, and he wanted more room in his, and he wanted to know if I would fix his over for him. I told him I would if I could get time. And I finally found the time and did it.

Q. 138. You never used or operated an improved California [330] grader or as it is sometimes called, a Robert Strain or Stebler grader?

A. No, sir; I have never seen them.

Q. 139. When did you first see them in use?

A. In the Benchly packing-house.

(Deposition of F. E. Proud.)

Q. 140. At Fullerton, California?

A. Yes, sir.

Q. 141. In 1901?

A. I can't say the date. Somewheres along there.

Q. 142. It was at the time they were building machines there in 1901?

A. One of the first that he built.

Q. 143. Wasn't it the first he built?

A. Probably so.

Q. 144. Don't you know that was the fact from your information at that time?

A. I can't swear that that is the fact.

Q. 145. Are you able to state positively that that was built in 1900, that you saw the Robert Strain grader in the Benchly packing-house? A. No.

Q. 146. Describe that grader.

A. Well, it is a grader similar to this California grader.

Q. 147. Referring to the model?

A. Yes, sir. It has a rope in the center the same as this, and then the rollers on the side are driven by a shaft which runs the full length of the grader on the side, and the rollers run with a little belt from that shaft. But the rollers are all the same size. That is, not graduated like this. [331]

Q. 148. Any means of adjusting these separate rollers? A. Yes, sir.

Q. 149. Each roller is separately and independently adjustable toward and from the belt or rope, is it not? A. I think they are, yes, sir.

Q. 150. Don't you know they are?

(Deposition of F. E. Proud.)

A. It has been quite a while since I have seen one of those. I am pretty sure they are.

Q. 151. Now, in the graders which you say you used from 1893 to 1903 at the Parker packing-house, in Orange, California, each one of the sections of wooden roller at each side of the machine contained a number of steps of different diameters, did it not?

A. Each roller did, you say?

Q. 152. Each roller.

A. Each section of the roller?

Q. 153. Yes.

A. Yes, they had more than one, all of them, I think.

Q. 154. Did they have three or four or five steps?

A. You mean the original one or the one that I built over?

Q. 155. The original one in 1893.

A. They had three and four. Four, I think, probably.

Q. 156. But if you adjusted one of those sections, you adjusted the grading space between each of the rollers, did you not?

A. To a certain extent, yes. Very little on one end, though.

Q. 157. You couldn't adjust each grade separately, could you? [332] A. Not accurately, no.

Q. 158. The only way you could adjust it at all was by warping the adjustment of the roller out of alignment with the other sections?

A. Yes, sir.

Q. 159. How long have you been out of the fruit

(Deposition of F. E. Proud.)

packing or grader business? A. Since 1903.

Q. 160. How long since you have been in the old packing-house of the packing company?

A. I was in there last summer. I was down there yesterday, but I didn't go into the house. I asked the parties if the machinery was the same as it was, and they said yes.

Q. 161. And all your knowledge as to what they are at present using is based upon what other people told you?

A. Since this year, yes. I saw it last year myself.

Q. 162. Is it not a fact, Mr. Proud, that the first orange grader or sizer that you ever saw in which each individual grade of fruit could be adjusted for independently of the other was in the Benchly packing-house in 1901?

A. I can't say as to the date.

Q. 163. When you saw the Robert Strain grader that we have referred to in the packing-house at Fullerton of the E. K. Benchly Company, that was the first? A. Yes, sir.

Whereupon the further taking of testimony herein was adjourned until Tuesday, April 30, 1912, at 10 o'clock A. M., at the same place. [333]

On Tuesday, April 30th, 1912, at 10 o'clock A. M., the further taking of these depositions was resumed, pursuant to the adjournment.

[Deposition of H. E. Walcott, for Defendants.]

Whereupon H. E. WALCOTT, a witness produced on behalf of the defendants, being first duly sworn according to law, testified as follows:

(Deposition of H. E. Walcott.)

Direct Examination.

(By Mr. ACKER.)

Q. 1. State your name, age, residence and occupation.

A. Herbert E. Walcott; age, forty-four; residence, Pomona, California; occupation, manager packing-house.

Q. 2. You are manager of a packing-house. What packing-house?

A. The Pomona Fruit Growers' Exchange.

Q. 3. How long have you been identified with the fruit industry, so far as relates to packing-houses, in this section of the country? A. Since 1893.

Q. 4. How long have you been manager of the packing-house? A. Since 1905.

Q. 5. Who had charge of the packing-house prior to your taking it? A. Mr. F. K. Adams.

Q. 6. What was your position prior to the year 1905?

A. The season of 1900-1901, I was with the San Antonio Fruit Exchange, when the San Antonio Fruit Exchange and the Pomona Fruit Exchange were affiliated. [334]

Q. 7. That is, they are affiliated companies?

A. Yes, sir.

Q. 8. Did you have any connection with the fruit industry prior to your association with the San Antonio Fruit Exchange?

A. Yes, sir; between 1893 and 1900 I was in Riverside a year and then at Pomona most of the time, in the orange business.

(Deposition of H. E. Walcott.)

Q. 9. Did you have charge of a packing-house?

A. I had charge and was in business myself for three years.

Q. 10. That is, in the orange business?

A. Yes, sir.

Q. 11. The packing of oranges?

A. Yes, sir; three seasons, starting with the year 1893. That would be starting at Riverside in 1893, and I was north a year, and then I was in business myself in 1896.

Q. 12. In 1896, you were in business yourself?

A. Yes, sir.

Q. 13. Engaged in the packing industry?

A. Yes, sir; orange packing.

Q. 14. Having a house of your own?

A. I did.

Q. 15. Where was that house located?

A. Pomona.

Q. 16. Are you familiar with the type of machinery employed in packing-houses in connection with the packing and sizing of fruit? A. I am.

Q. 17. Did you use in your packing-house in 1896 any machinery for the grading or sizing of fruit?

[335] A. I did.

Q. 18. Please describe what type of machine you used at that time for the sizing of fruit.

A. A rope-and-roller sizer called the California sizer. The rope was run in a groove or slot carrying the oranges and the rollers would consist of two or more sections end to end, power driven.

Q. 19. What do you mean by "two or more sec-

(Deposition of H. E. Walcott.)

tions end to end”?

A. The California sizer was made in two sections and three sections. That is, on a full sizer. It would consist of a double amount, on the opposite side, with a full sizer. They were made in the full sizer or half sizer. There were two or more sections end to end, power driven, on a side.

Q. 20. (By Mr. LYON.) You mean what we call a double grader? A. Yes, sir.

Q. 21. (By Mr. ACKER.) Made as double graders or single graders? A. Yes, sir.

Q. 22. By the term “section,” please explain more specifically what you mean, or, explain how a section differs at all from a roller.

A. A section would be a series of rollers—two or three—for instance, this grader that you have here—

Q. 23. Referring to the model California grader?

A. Yes, sir. That is the model of the California grader such as was used in the packing-house.

Q. 24. You say such as was used by you in your packing-house in 1896?

Mr. LYON.—Objected to as not the best evidence, leading, [336] calling for the conclusion of the witness and not a statement of facts.

A. The sizer we used in 1896 was two sections. The rollers were end to end, power driven; and in 1901 was the first with three rollers on a side that I saw.

Q. 25. (By Mr. ACKER.) Does your knowledge of a sizer comprising three rollers on a side date from 1901? A. Yes, sir.

(Deposition of H. E. Walcott.)

Q. 26. And where or in what packing-house was such a type of California sizer used, to your knowledge? A. The three or two?

Q. 27. The three.

A. In the Pomona Fruit Growers' Exchange.

Q. 28. Is that the packing-house that Mr. Adams had charge of? A. Yes, sir; at that time.

Q. 29. Is that the only grader that was in use at the Pomona packing-house?

A. No, sir; we had a California sizer the same year with two sections, used at the same time.

Q. 30. That conformed to the sizer which you used in your packing-house in 1896?

Mr. LYON.—Objected to as leading and calling for the conclusion of the witness and not a statement of facts.

A. It does.

Q. 31. (By Mr. ACKER.) Please state how you happened to have knowledge of the use of the sizer you have testified to in the Pomona packing-house prior to the year 1901.

A. Being in business in Pomona, in the same business—in the same line of business—I was back and forth at the Pomona [337] Fruit Growers' Exchange house.

Q. 32. How were the rolls—the end-to-end rolls that you have testified about of the California sizer—supported?

A. With a bracket at the center and a bracket at the end.

Q. 33. Can you state whether or not any means

(Deposition of H. E. Walcott.)

were provided for adjustment of the end-to-end rollers?

Mr. LYON.—Objected to as leading and suggestive of the answer.

A. Yes, sir; they were adjustable.

Q. 34. (By Mr. ACKER.) What was the purpose of providing adjustment to the rollers?

A. To regulate the size of the fruit.

Q. 35. Were the end-to-end rollers of the California sizers that you have testified to rollers of uniform diameter, or were they stepped rollers?

A. They were stepped rollers on the California sizer.

Q. 36. What was the object in stepping the surfaces of the end-to-end rollers?

A. To make the several sizes, for the nine sizes in oranges. Each size was an eighth of an inch in diameter less.

Q. 37. Please examine the model California sizer before you, and state how it conforms in its construction and arrangement of working parts to the sizer which you have testified to was employed by you in your packing-house in 1896, and known to you to have been in use in the Pomona packing-house as testified to.

Mr. LYON.—Objected to as incompetent, no foundation laid, [338] the witness not having qualified to answer the question, and it not being shown that the witness had anything whatever to do with the building of the model referred to. The further objection is made that it is not the proper method of

(Deposition of H. E. Walcott.)

proof. The witness should state the facts and the construction of the sizer he has referred to, and not compare it with some exhibit with which he has had nothing to do. The further objection is made that it is incompetent and not the best evidence.

A. The model before us is a model built after the model of the California grader.

Q. 38. (By Mr. ACKER.) Will you please describe in your own language the operation of the various parts of the sizer which was used by you in your packing-house during the year 1896 and in the packing-house of the Pomona company prior to the year 1901, as you have testified to?

A. It consists of two or more rollers on a side, with a rope traveling in a groove. The rollers of the sizer that we used in 1906 was of two sections on a side. We also used after 1900 a section of the same model—the same build—of California sizer, built in three sections. The section consists of two or more steps or rollers end to end.

Q. 39. In your answer referring to the grader with two rollers end to end, you say the year 1906. Did you mean 1906? A. 1896.

Q. 40. Did you use any other type of sizer in your packing-house, beginning with the year 1896, and in the packing-house of the Pomona company prior to 1901, other than that which you have described? [339] A. No, sir.

Q. 41. Did that California sizer which you have described take care of the entire output of the packing-house, so far as the sizer was concerned?

(Deposition of H. E. Walcott.)

A. Yes, sir.

Q. 42. Will you state approximately what the output of your house was in which you utilized the sizer in 1896?

A. In 1896, about forty cars. That was in my own house.

Q. 43. That is, forty cars for the entire season?

A. Yes, sir.

Q. 44. How long was that sizer used in your house? A. About three years; three seasons.

Q. 45. Is that packing-house still in existence?

A. No, sir. One of them is. The three years it was in business—it operated one year as a cannery. The cannery is in existence now.

Q. 46. I had reference to the sizer.

A. Not to my knowledge.

Q. 47. I will direct your attention to two photographs, one marked "Defendant's Exhibit Parker Packing-house Sizer" and the other marked "Defendant's Exhibit Photo Upland Sizer," and ask you to examine the same and state if you have any knowledge of the machinery conforming thereto, or whether you can identify it in any manner whatsoever.

Mr. LYON.—Objected to as incompetent, no foundation laid, the witness not having qualified to answer the question, and not the best evidence.

A. The photograph that I have before me is a photograph of the sizer that was in use in the Pomona Fruit Growers' [340] Exchange house at Pomona, and consists of two rolls on a side, end to end.

(Deposition of H. E. Walcott.)

Mr. ACKER.—Witness refers to “Defendant’s Exhibit Parker packing-house sizer.”

A. The one that I have now is one with a section of three rolls, end to end, on a side. That is a model of the later one that was used by the Pomona Fruit Growers’ Exchange.

Q. 48. Does the machine portrayed in the exhibit Parker packing-house sizer photograph conform to the machine that was used in your packing-house in the year 1896?

A. That one of the small sizer, yes, sir.

Q. 49. That is, the one used in the Pomona packing-house prior to 1900? A. Yes, sir.

Q. 50. And the other one is a photograph representing a machine of the three-roll type, end to end, which was used in the Pomona packing-house?

A. Yes, sir; and it is still in operation. We still have a model of that same machine, three rolls end to end, power driven, in use at the present time.

Q. 51. And its use dates from what time?

A. To my knowledge, 1900.

Q. 52. Have you at the present time in the Pomona packing-house in use any sizer other than the one you have testified to?

A. We have the California and the Strain or Stebler sizer.

Q. 53. In the Stebler sizer, how are the rolls constituting one member of the fruit run-way arranged?

A. A continuous set of rolls end to end.

Q. 54. How are those rollers driven? [341]

A. With a power belt.

(Deposition of H. E. Walcott.)

Q. 55. A single belt for driving all the rolls?

A. A single belt for driving each individual roll.

Q. 56. That is, each roll is independently power driven? A. Yes, sir.

Q. 57. Have you ever operated the Stebler sizer which you testified to without the rolls being power driven?

Mr. LYON.—Objected to as leading.

A. They were not operated.

Mr. LYON.—We move to strike the answer from the record and exclude it from consideration on the ground stated in the objection, and on the further ground that it is not responsive to the question.

(The question No. 57 is read.)

A. Only at times when the belt would break, before we could shut the sizer down to put a new belt on. We were prepared and kept extra belts hanging near the sizer, so that as soon as a belt breaks we put them on.

Q. 58. (By Mr. ACKER.) What have you to state relative to the operativeness of the Stebler sizer in case the power was not used with the rollers?

A. It would hold the fruit and clog the sizer up.

Q. 59. Would it be an operative device for the sizing of fruit? A. It would not size the fruit.

Q. 60. Would it have to be a positive power driven roll?

Mr. LYON.—Objected to as leading.

A. Yes, sir.

Q. 61. (By Mr. ACKER.) Have you personal charge of that machine? [342] A. I have.

(Deposition of H. E. Walcott.)

Q. 62. And can you describe the action of the sizer when the belts have broken or have been removed?

A. When the belts are broken and not in place, the roller will become dormant and will stop; the fruit clogs up and squeezes down under the roller, and the fruit approaching there will jump over into the different bins—the bins opposite or under where the roller is dormant.

Q. 63. For what length of time have you operated the Stebler sizer? A. 1900.

Q. 64. How does the moving member of the fruit run-way of the Stebler sizer compare with the moving members set forth in the model of the California sizer before you?

A. The moving member would be a rope traveling. The opposite would be the rollers—individual rollers—end to end.

Q. 65. How does the grooved guide in the model California exhibit before you compare with the guide of the Stebler machine? A. The same.

Q. 66. Without the use of power driven end-to-end rolls, would you consider the Stebler device, from your knowledge of its working, an efficient and operative device for the sizing of fruit?

Mr. LYON.—Objected to as calling for the conclusion of the witness and not for a statement of facts, and no foundation laid.

A. No, sir.

Q. 67. (By Mr. ACKER.) You have several times throughout the [343] course of your examination

(Deposition of H. E. Walcott.)

used the expression "end-to-end rollers," and I would ask you what you mean by the expression "end-to-end rollers."

A. A continuous roll, coming together end to end.

Q. 68. Do you consider the rollers in the Stebler machine to which you have testified, as being end to end in the same manner as you have used the expression in connection with the California grader?

Mr. LYON.—Objected to as leading.

A. They are.

Cross-examination.

(By Mr. LYON.)

Q. 69. You have used the Stebler sizer since 1900?

A. Yes, sir.

Q. 70. Where? A. The Pomona house.

Q. 71. Describe that Stebler grader that you have used since 1900.

A. It consists of two ropes, one on either side of the center, and running in a groove, with end-to-end rollers on either side.

Q. 72. The end-to-end rollers are each separate rolls, are they? A. They are.

Q. 73. And each roll is of the same diameter?

A. Yes, sir.

Q. 74. And each roll is driven by a belt?

A. By an individual belt. [344]

Q. 75. And you have used that machine since 1900?

A. That is the date I stated. That is the date.

Q. 76. Now, was it in 1900 or 1901 that you first used a California grader with three rollers or three sections on each side?

(Deposition of H. E. Walcott.)

A. The season of 1900–1901.

Q. 77. And it was the same season that you received a Stebler grader? A. Yes, sir.

Q. 78. The dates given in your testimony here this morning, you are depending entirely upon your memory for? A. Just from my memory.

Q. 79. When did the Pomona Fruit Growers' Exchange put in the Parker sizer? A. 1910.

Q. 80. And you received notice the same year that Mr. Fred Stebler claimed that the Parker sizer was an infringement—

A. 1910 or '11. We received it in the season of 1910–11.

Q. 81. It was put in in the fall of 1910?

A. Yes, sir.

Q. 82. And you received notice that Mr. Stebler claimed that the machine was an infringement of his patent? A. No, sir, I don't think so.

Q. 83. If such a letter was received at the office of the Pomona Fruit Growers' Exchange in Pomona, would you have seen it?

A. I would have seen it.

Q. 84. You have known, though, for some time, that Stebler claimed that the Parker sizer was an infringement? [345]

A. I have understood he did.

Q. 85. And that your exchange was liable if it was an infringement? A. I have so understood.

Q. 86. How generally in use was the California grader or sizer prior to 1902?

A. I can't state the number of houses, but it was

(Deposition of H. E. Walcott.)

quite generally used in the small amount of business that was done at that time. The orange business had not got to the size it is now.

Q. 87. And the California grader was the standard grader during the time I have referred to in the last question, was it not? A. Prior to what year?

Q. 88. 1902. A. Yes, sir.

Q. 89. Has your Pomona Fruit Exchange or any other packing-house that you have been associated with put in any new California sizers since 1902?

A. No, sir.

Q. 90. What have they put in?

A. The Stebler and Parker.

Q. 91. Then, from 1902 up till the Parker machine came on the market, in the fall of 1910 or season of 1910-11, the Strain or Stebler sizer, being known in this testimony by both names, was the sizer that was put into use?

A. And the California together. We used both of them.

Q. 92. But you stated that they put in no new graders.

A. They had them in prior to that time. [346]

Q. 93. But they put in no new machines after that time? A. Except the Strain and Stebler.

Q. 94. (By Mr. ACKER.) Do you refer to the Pomona house?

Mr. LYON.—He is referring to his general observations as well as the Pomona house.

A. I am speaking about the Pomona house; not other packing-houses.

(Deposition of H. E. Walcott.)

Q. 95. Does the same testimony hold true generally as to your general observation throughout Southern California in all packing-houses?

A. I can't answer that.

Q. 96. Why can't you answer it as to your observation?

A. There might be a number that I have not visited.

Q. 97. Of those that you have visited, does it not hold true? A. I would say it might.

Q. 98. Answer the question. Does it or does it not hold true in those that you have observed yourself? A. Since 1902?

Q. 99. Yes, sir. A. Up to 1910?

Q. 100. Yes, sir.

A. Most of them, as far as my observation, put in probably the Strain sizer or Stebler.

Q. 101. Can you give us a single instance where a new California grader was installed in any packing-house from 1902 to the fall of 1910?

A. No, sir.

Q. 102. You say that in the California sizer as you used [347] it from 1893 on, the object of the adjustment of the roller side of the grader was to regulate the size of the fruit. Is that true?

A. To regulate the sizes of the fruit, yes, sir.

Q. 103. Each one of the sections of that roller of each California grader with which you have been familiar was composed of more than one stepped portion, was it not?

A. It consists of two or more, end to end.

(Deposition of H. E. Walcott.)

Q. 104. The end-to-end rollers or sections, each had two or more diameters, did they not?

A. They did.

Q. 105. What was the purpose of having two or more diameters?

A. In order to get the required number of sizes that the fruit was commercially packed in.

Q. 106. In other words, each one of those sections would give you more than one size opening for the fruit to fall through? Isn't that correct?

A. Each one of the sections where the section had two or more on, it would.

Q. 107. You say they all had two or more on?

A. Yes, sir.

Q. 108. The Strain or Stebler sizer permits the independent individual adjustment of each roller toward and away from the belt or rope, so as to adjust each size independently of any other size, does it not? A. It does.

Q. 109. In that respect it differed from any other sizer that you had ever seen before? Is that not true? [348] A. From the California sizer, yes.

Q. 110. Are you familiar with any other kind of graders than the Parker, the Strain or Stebler, and the California sizer, that have been in use in Southern California from 1893 to the present time?

A. I believe there was a sizer gotten out by a party at Orange that had a belt instead of a roller.

Q. 111. That was Tom Strain?

A. I can't say the make of that.

Q. 112. There was a flat horizontal belt on which

(Deposition of H. E. Walcott.)

the fruit was carried?

A. I think it was carried on two ropes and taken off with a cross-belt.

Q. 113. Many of those machines in use?

A. I have seen a few, but I don't know how many.

Q. 114. Do you know where any of them are used at the present time? A. I couldn't say.

Q. 115. Are you familiar with the rope grader?

A. I have seen them in use. You mean with more than one rope on a side?

Q. 116. A grader consisting of two longitudinal ropes which diverged as they came away from the receiving end of the grader.

A. I am not familiar with the working of that.

Q. 117. Some of them were used in the early days?

A. I can't give you the date.

Q. 118. Some of them were in use?

A. Yes; some few years back; it is not very long since [349] they were in use.

Q. 119. Practically all of them have been displaced at the present time? A. I can't say.

Q. 120. I mean so far as you know?

A. So far as I know.

Q. 121. You don't know where any of them are in use at the present time?

A. I can't tell you what houses. I think some out west of Covina or Glendora or Azusa are used there.

Q. 122. You say that this California grader with the three-stepped sections on each side is still in use by the Pomona Fruit Exchange? A. Yes, sir.

Q. 123. For what purpose? A. Sizing oranges.

(Deposition of H. E. Walcott.)

Q. 124. Where?

A. At the Reservoir street plant in Pomona.

Q. 125. What oranges?

A. Oranges handled by the Exchange—by the association.

Q. 126. And you have how many Stebler or Strain sizers in that house at the present time?

A. Three.

Q. 127. And how many Parker graders?

A. Two.

Q. 128. How many graders did you have in that house prior to the time that you put in the Stebler grader?

A. That house was built and completed four years ago. The Stebler sizers were put in then. [350]

Q. 129. Had no sizers before that whatever?

A. No; it was a new house.

Q. 130. Were those new sizers—the Stebler sizers—or had they been used before?

A. One of them.

Q. 131. Which one?

A. The California sizer and one Stebler sizer had been used.

Q. 132. Where had it been used?

A. In one other house in Pomona.

Q. 133. How many graders had you in that house at the time you put in the first Stebler sizer?

A. We had a branch house at Towne avenue with one sizer, and two at the Park avenue house.

Q. 134. What kind of sizers did you have in the Park avenue house? A. California.

(Deposition of H. E. Walcott.)

Q. 135. How many sizers? A. Two.

Q. 136. Where was this first Stebler sizer first installed?

A. That was under Mr. Adams' management, and I couldn't tell you which house.

Q. 137. You don't know what grader or sizer it displaced? A. No, sir.

Q. 138. What became of the two California sizers that were in use in the Park avenue house?

A. One of them was dismantled last June—the smaller one with two sections—and the other sizer was taken to the Reservoir street house. [351]

Q. 139. What became of the one that has been in the other branch house?

A. That was taken to the Reservoir street house.

Q. 140. Are those in operation? A. Yes, sir.

Q. 141. At the present time? A. Yes, sir.

Q. 142. You have referred to a photograph which has been shown you and which is marked Defendant's Exhibit Parker packing-house sizer. Do you know anything about when this photograph was taken?

A. Last summer some time, about June or July.

Q. 143. Were you present when it was taken?

A. I was not.

Q. 144. Do you know of your own knowledge anything about the machine it was taken of?

A. Yes, sir.

Q. 145. What machine was it?

A. The California sizer or grader of the pattern with two rolls on a side, end to end.

(Deposition of H. E. Walcott.)

Q. 146. Where was that machine installed?

A. In Pomona.

Q. 147. The one that this particular photograph was taken from? A. Yes, sir.

Q. 148. Who told you so?

A. The foreman, Mr. A. E. Barnes.

Q. 149. You have no personal knowledge of the fact?

A. Not seeing the photograph taken. [352]

Q. 150. Have you examined the machine that you have referred to since this photograph was taken, and compared it?

A. Yes, but not to compare the machine with the photograph that was taken.

Q. 151. On this exhibit, defendant's photo Upland sizer, there appear to be three sections on the roller side of the grader, the one section having two diameters or steps, another section having three diameters or steps, and the third section having four diameters or steps. Is that correct?

A. That is correct with the model that we have in use now. The nearest to the intake is 2, and the next is 3 and the next is 4.

Q. 152. What was the object of lengthening that machine out? A. A larger capacity of the bins.

Q. 153. And why was a larger capacity of the bins required?

A. A larger volume of fruit handled yearly.

Q. 154. Who lengthened that machine out?

A. The manufacturers, I presume.

Q. 155. Who are the manufacturers?

(Deposition of H. E. Walcott.)

A. Just when that sizer was bought, I can't say.

Q. 156. Then, you have no personal knowledge as to who lengthened it out? A. No, sir.

Q. 157. Did you ever lengthen any of those California sizers out yourself? A. I did not.

Q. 158. Did you ever have any of them lengthened out for you? A. No. [353]

Q. 159. Or did any of the company that you were connected with have such work done? A. No, sir.

Q. 160. With all of the California graders that you have used or seen, the diameters of the roller portion of the grade-way had from one to two or three sections, steadily decreasing in diameter from the receiving end to the discharging end of the run-way, had they not? A. Yes, sir.

Q. 161. And in the Stebler or Strain graders, rollers of a single diameter are used?

A. Not altogether. A roller is sometimes cut out about the center

Q. 162. For what purpose is that?

A. No purpose—to make the fruit go through the roll at a certain place.

Q. 163. That is, at the center?

A. Near the center.

Q. 164. And the larger diameter portion of the roll carries the fruit along till it gets to that particular place? A. The rope and roller together.

Q. 165. Are the Parker sizer and the Stebler sizers of the Pomona Exchange used in the same packing-house building? A. Yes, sir.

Q. 166. It is a fact that you have been around

(Deposition of H. E. Walcott.)

throughout the packing-houses of Southern California a great deal in the last few years?

A. In some parts. I go around once in awhile. Not a great deal. [354]

Q. 167. To what extent?

A. I may take a trip probably not every year, but I would take a trip through some of them. Some in the immediate neighborhood.

Q. 168. You have attended the managers' meetings of the various packing-houses in the several years in the last ten years?

A. No, sir; I have attended a few times.

Q. 169. When?

A. Managers' meeting at the packing-houses?

Q. 170. Managers of packing-houses have met, have they not, together at various different times in the last ten years?

Mr. ACKER.—Objected to as immaterial, irrelevant and on the further ground that it is not proper cross-examination.

A. No, sir; not very often.

Q. 171. (By Mr. LYON.) How often have they met, to your knowledge?

A. I can't say just how many.

Q. 172. More than once?

A. Not that I know of.

Q. 173. Once? A. I think they met once.

Q. 174. And your best recollection is that it was once? A. Yes, sir.

Q. 175. And at such meeting packing-house equipment was discussed, was it not?

(Deposition of H. E. Walcott.)

A. With other things, yes.

Q. 176. The subject of fruit graders as well as other packing-house equipment, was discussed at that meeting? [355] A. The various equipments.

Q. 177. You had a fair opportunity, and in fact, a good opportunity, to keep posted on the equipment generally used in the packing-houses in Southern California, have you not?

A. I don't know as I have, any very great opportunity.

Q. 178. Then, you don't pretend to be posted on what is in general use? A. Only in a general way.

Q. 179. The first Stebler sizer with the independently individually adjustable rollers that you used, was in 1900? Is that correct?

A. I don't think I said in 1900.

Q. 180. I ask you the question if that is not correct. I didn't ask you what you said. The record will show what you said.

A. I would like to have the question stated again. (The question is read.) I didn't use them till 1905, —until I actually went into the packing-house.

Q. 181. Where did you see them in 1900?

A. In passing into the packing-house.

Q. 182. Of the Pomona Fruit Exchange?

A. Yes, sir.

Q. 183. Did you ever see one of those sizers before that time? A. Not before that, no.

Q. 184. Isn't it a fact that in the Pomona Fruit Exchange house they used that Stebler sizer prior to the three-section California grader?

(Deposition of H. E. Walcott.)

A. Not to my knowledge. [356]

Q. 185. What do you mean by that answer?

A. I was not personally connected with that house, only passing in through there, before 1900.

Q. 186. Then, you don't know whether they used the three-section California grader as you have described it, or the Stebler grader, first?

A. That I can't answer.

Q. 187. You mean that you don't know now which it was?

Mr. ACKER.—I submit that the witness has answered the question and answered it properly, and the question now put to the witness is a deliberate attempt to force a different construction on his answer.

Mr. LYON.—An exception is taken to the objection of counsel as an attempt to instruct the witness, and it is submitted to the Court that the answer to a question by a witness in the words "That I cannot answer" is not an answer to the question, but it may be read that he cannot answer the question; and I will ask the question to be re-read to the witness, and have him answer yes or no, giving any such explanation as he desires after so directly answering the question.

A. They were put in before I had charge of the house and I could not answer that question.

Redirect Examination.

(By Mr. ACKER.)

Q. 188. Have you had any occasion to investigate when the Stebler sizer was installed in the Pomona packing-house? A. No, sir.

(Deposition of H. E. Walcott.)

Q. 189. Are you positive whether it was in there during [357] the years 1900, 1901, 1902, or 1903, that it was first installed?

Mr. LYON.—Objected to as leading and suggestive.

A. As I have not looked that up, I won't say positively.

Q. 190. (By Mr. ACKER.) Would the fact that I direct your attention that the Strain patent did not issue till the year 1903, in any way serve to refresh your memory on that point?

Mr. LYON.—Objected to as not redirect examination, not the proper method of proof, and an evident attempt to educate the witness, and not a test of the recollection of this witness as to facts as to which he is here to testify. This witness is produced to prove a prior use, and under the rules of evidence in relation to such defense we submit that this method of redirect examination is not proper, and further that it does not appear from the testimony of this witness that he has any knowledge whatever as to the date upon which said Strain patent issued and, therefore, it is assuming facts not testified to by the witness or within his knowledge.

A. That does not recall my memory.

Q. 191. You didn't have control of the packing-house at the time the Stebler or Strain sizer was installed, did you?

Mr. LYON.—Objected to as leading.

A. No, sir; I did not.

Q. 192. (By Mr. ACKER.) You have been asked

(Deposition of H. E. Walcott.)

whether the Pomona association with which you are connected has been notified as to the fact that the use by the packing-house of the Parker sizer is claimed by Mr. Stebler to be an infringement of the patent owned by him for an improved sizer, and I will ask whether this in any manner has influenced your testimony in connection with this case. [358]

A. No, sir.

Q. 193. How did and does the California grader which you have testified to compare in efficiency as to the grading of fruit with the Stebler or Strain sizer?

Mr. LYON.—Objected to as not redirect examination.

A. The same; practically the same.

Q. 194. (By Mr. ACKER.) After an initial adjustment has been given the sizing rolls of the grader, what necessity exists for subsequent change of any initial adjustment? A. Very little.

Q. 195. How often is a change in the adjustment of rolls made?

A. No adjustment is changed unless the size of the fruit runs small. You change them all—you slip them all one size or two sizes. But as to changing each individual roll, that is very seldom done.

Q. 196. Does this hold good so far as relates to both the California sizer and the Strain or Stebler sizer? A. Yes, sir.

Q. 197. Will the California sizer which you have testified to as having been used by you during the years 1896 and subsequent years, handle fruit to the

(Deposition of H. E. Walcott.)

same extent as the Stebler or Strain sizer? That is, as to quantity?

Mr. LYON.—Objected to as leading.

A. No, sir.

Q. 198. (By Mr. ACKER.) Which will handle the most fruit?

A. I will correct that. The smaller sizer—the smaller sizer would not; but the larger California—the three-section—and the Strain, I think is very little difference. [359]

Q. 199. After an initial adjustment has been given to the sizing rolls of either the Strain or California grader, what advantage is possessed by the Strain or Stebler sizer over the California sizer which you have testified to, so far as relates to the sizing of fruit?

Mr. LYON.—Objected to as leading.

A. Practically nothing.

Recross-examination.

(By Mr. LYON.)

Q. 200. You mean to tell me that with the Stebler sizers that you have used in the Pomona Fruit Exchange packing-house, you never at any time during the grading of fruit adjust one of the rollers?

A. I said very seldom.

Q. 201. What is the purpose of adjusting them at all?

A. If one should happen to slip; if you want to set them for the size of the runs.

Q. 202. And you never change it during the run?

A. No, sir.

(Deposition of H. E. Walcott.)

Q. 203. That has been your experience?

A. Unless the individual roller should slip and change its position.

Q. 204. Then your idea is that if that roller was made solid, so that you simply have an adjustment of the roller from one end to the other—a coincident adjustment—you would have an equally good machine as the Stebler machine?

A. If you adjust the end.

Q. 205. Say that the whole roller section moved as one [360] piece. You would have an equally good machine as the Stebler machine?

A. So far as the sizing.

Q. 206. What do you mean by “so far as the sizing” is concerned? Why do you qualify the answer?

A. In taking into consideration the capacity, the longer machine you have—let me have the question. (Question No. 206 read.) I mean by that the individual size of the orange.

Q. 207. Didn't you just tell us that the California sizer with the three sections had the same capacity as the Stebler sizer?

A. Practically,—running at the same speed.

Q. 208. And you never adjust two of the individually adjustable rollers of the Stebler sizers to the same size opening?

A. No, sir. Each one takes care of a bin itself.

Q. 209. Then you never carried the grade of a given bin to the next bin because it is full?

A. No, sir.

Mr. ACKER.—Counsel for defendants now offers in evidence a printed copy of United States letters patent No. 399,509, granted F. M. Ellithorpe, under date of March 12, 1889, for an improved fruit assorter. The same is marked “Defendants’ Exhibit Ellithorpe Patent.”

I also offer in evidence printed copy of United States letters patent 430,031, granted J. A. Jones under date of June 10, 1890, improved machine for assorting or sizing fruit, and ask that the same be marked “Defendants’ Exhibit Jones Patent.” [361]

Also I offer in evidence printed copy of United States letters patent No. 442,288, granted J. A. Jones, December 9, 1890, for improved machine for assorting and sizing fruit and so forth, and ask the same to be marked “Defendants’ Exhibit Jones Patent No. 2.”

I offer in evidence a printed copy of United States letters patent No. 456,092, granted H. H. Hutchins, under date July 14, 1891, for an improved assorting machine, and ask the same to be marked “Hutchins Patent.”

I also offer in evidence a printed copy of letters patent 458,422, granted J. T. Ish, August 25, 1891, improved fruit-grading machine, and ask that the same be marked “Defendants’ Exhibit Ish Patent.”

I offer in evidence United States letters patent 465,856, granted H. H. Hutchins under date December 29, 1891, for improved fruit and vegetable assorter, and ask that the same be marked “Defendants’ Exhibit Hutchins Patent No. 2.”

I offer in evidence a printed copy of United States letters patent No. 466,817, granted E. E. Woodward, under date January 12, 1892, for an improved orange assorter, and ask that the same be marked "Defendants' Woodward Patent."

I offer in evidence printed copy of United States letters patent No. 475,497, granted G. A. and C. F. Fleming, under date May 24, 1892, for an improved fruit grader, and ask that the same be marked "Defendants' Exhibit Fleming Patent."

I offer in evidence a printed copy of United States letters patent No. 482,294, granted A. C. Burke under date September 6, 1892, for an improved fruit sizer, and ask that the same be marked "Defendants' Exhibit Burke Patent." [362]

I also offer in evidence printed copy of United States letters patent No. 529,032, granted H. C. Jones under date November 13, 1894, for an improved fruit sizer, and ask that the same be marked "Defendants' Exhibit Jones Patent 1894."

I offer in evidence printed copy of United States letters patent No. 534,783, granted A. Cerruti under date of February 26, 1895, for an improved fruit grader, and ask that the same be marked "Defendants' Exhibit Cerruti Patent."

I offer in evidence printed copy of United States letters patent No. 538,330, granted A. D. Huntley under date April 30, 1895, for an improved orange sizer, and ask that the same be marked "Defendants' Exhibit Huntley Patent."

I also offer in evidence printed copy of United

States letters patent 671,646, granted R. G. Bailey under date April 9, 1901, for an improved fruit grader, and ask that the same be marked "Defendants' Exhibit Bailey Patent."

I also offer in evidence a printed copy of United States letters patent 673,127, granted E. N. Maull under date April 30, 1901, for an improved fruit-sorting machine, and ask that the same be marked "Defendants' Exhibit Maull Patent."

I also offer in evidence a printed copy of United States letters patent 713,484, granted C. D. Nelson under date November 11, 1902, for an improved fruit assorting table, and ask that the same be marked "Defendants' Exhibit Nelson Patent."

The said letters patent being introduced in evidence for all the purposes of the answer.

Mr. LYON.—Complainant objects to the offer of Defendants' Exhibit Bailey Patent, Defendants' Exhibit Maull Patent, and Defendants' Exhibit Nelson Patent, on the ground that the same [363] are incompetent, irrelevant and immaterial for any purposes in this case, the same being issued subsequent to the application for the patent in suit, and being in fact subsequent to the invention of the invention set forth in the patent here in suit by Robert Strain, and not being a part of the prior art. The objection is noted to the recital on the face of the printed copies of these patent exhibits as to the date of filing of the application therefor, on the ground that the same is not competent evidence for the proof of such fact, and not the proper method of proof.

Mr. ACKER.—Defendants offer in evidence certified copy of file-wrapper and contents of the application of Charles Rayburn which eventuated in the grant of letters patent No. 726,756 to Charles Rayburn under date April 28, 1903, for an improvement in fruit graders, the same being the application for letters patent on the part of Charles Rayburn referred to in the bill of complaint on file herein, the application for which letters patent was filed in the United States patent office prior to the application of Robert Strain which eventuated in the reissue of letters patent in suit, and I ask that the same be marked “Defendants’ Exhibit File-wrapper Rayburn Application for Letters Patent.”

Mr. LYON.—Objected to as incompetent, irrelevant and immaterial for any of the purposes of this case, the same not being a public record but being a private record, or a secret record, and not subject to inspection of any person until after the date of the application by Robert Strain for the patent in suit and all of such matter being as a matter of fact subsequent to the filing of the application for the patent [364] in suit by Robert Strain; each and every of the statements, matters and things contained in said file-wrapper and contents is objected to as not the best evidence of the facts therein set forth, and inadmissible in evidence to prove the same.

We object to so much of the record as pretends to set forth that said exhibit is a certified copy of “the application for letters patent on the part of

(Deposition of George D. Parker.)

Charles Rayburn referred to in the bill of complaint herein," the same being volunteered by counsel for defendants.

Whereupon the further taking of these depositions was adjourned until 1:30 o'clock P. M., at the same place. [365]

On Tuesday, April 30, 1912, at 1:30 o'clock P. M., the further taking of testimony herein was resumed, pursuant to the adjournment, the same parties being present.

[Deposition of George D. Parker, for Defendants.]

GEORGE D. PARKER, a witness produced on behalf of the defendants, being first duly sworn according to law, testified as follows, to wit:

Direct Examination.

(By Mr. ACKER.)

Q. 1. State your name, age, residence and occupation.

A. George D. Parker; Riverside; forty-two; manufacturer.

Q. 2. Manufacturer of what?

A. Packing-house machinery.

Q. 3. Are you one of the defendants in the present suit? A. I am.

Q. 4. How long have you been engaged in manufacturing packing-house machinery?

A. About twelve years or thirteen.

Q. 5. Where is your place of business located?

A. Riverside.

Q. 6. Are you the proprietor of the Parker Machine Works mentioned as one of the defendants in

(Deposition of George D. Parker.)

the present action? A. Yes, sir.

Q. 7. You say you are a manufacturer of packing-house machinery. What kind of devices are included in the packing-house machinery?

A. Box-nailing machines, re-weighters, sizers, and a general line of machinery used in the handling of oranges. [366]

Q. 8. Does your knowledge of packing-house machinery and the uses thereof date back of your identity with the manufacturing works of the Parker machine-shops?

A. Yes, sir. I might state that I was born in California, raised in Southern California, and in my early boyhood our people were among the first to handle oranges, and we remember the various stages that the packing-house machinery has been improved from time to time, beginning with the sizers in which the rolls were stepped, having usually about nine stepped portions on each roller. Later on as the output of fruit increased, it looked impractical to have one roller longer than three or four feet. The rollers of the roller-sizers were cut in two, making the rollers in two pieces. Later it was made in three, making three rollers end to end. In the early handling of the fruit the earlier or smaller sizers were quite often taken to the field and the fruit was sized and packed without ever entering or being taken to a house. Later on in the early '90's, as the industry grew, some of the earlier packers (like Earl and Fay) commenced building houses to which the fruit was hauled from the field and packed in

(Deposition of George D. Parker.)

the houses. This, of course, was centralizing to a certain extent and drawing or bringing more than one grower's fruit to one point, and made it necessary to have a larger output. This made it necessary to have sizers of larger capacity. Although the earlier sizers, being rope-and-roller, would handle as much fruit as the later ones, they were restricted to the amount of bin-room, and as the amount of bin-room or bin-space had a great deal to do with the output of the house, it has been a continual adding of more or longer bins, rather than [367] the ability to handle more fruit through the sizer. The California sizers until 1902 or '03 or thereabouts were considered the best in their line, and were lengthened out from time to time until they had in some instances four sections or rollers end to end. About 1902 or '03 there were a great many sizers installed that they called overhead sizers. They were built under the Rayburn patent and were set quite high from the floor, having chutes or spouts running to the bins on the main floor. This was principally to get more bin-room. This Rayburn sizer was an end to end roller or rollers in nine or ten sections. In that respect only did it differ from the earlier California sizer in which the sections were three and four rollers end to end. It is not very practical to have a wooden roller longer than four feet, without some tendency to warp. In the early California sizer, the rope or propelling member was carried in a grooved guide, the roller or rollers being power-driven. This holds true of the Ray-

(Deposition of George D. Parker.)

burn or overhead sizer and also of the Stebler sizer. I might say in this connection that the Stebler sizer is known by that name more than the Strain sizer. The ordinary packing-house man in speaking of the Stebler sizer knows that it is the one in which the sections are about nine or ten in number, while in the speaking of the California sizer he will think immediately of the old-time ones that have been in use which the rolls were either in one, two or three end-to-end rolls, and also power-driven. The Stebler or Strain sizer is identical, having the rope running in a grooved guide, the rollers being power-driven and continuously in motion. The roller types or, for that matter, all of the California sizers [368] or nearly all have been replaced, although there are still some in use.

Q. 9. Your association with the fruit industry and, more particularly, in connection with the fruit-sizing machines, dates from what time?

A. From early boyhood, commencing from 1886.

Q. 10. And in 1886 what form of apparatus was employed for sizing fruit, if any at all?

A. I think in 1886 it was what was commonly known as the Maull—there was another sizer that was used some, in which there was two rolls with a spirally wound belt to feed the fruit in.

Q. 11. When, to your knowledge, did the California sizer first come into use in connection with the sizing of the fruit? A. Along in the early '90's.

Q. 12. Describe in detail the construction of what you have termed the California sizer in use in the

(Deposition of George D. Parker.)

early '90's, as you have testified.

A. The first California sizer that I have recollection of was one in which the roller was one continuous roll, with stepped portions upon the same. This roller was adjustable to and from the rope running in a grooved guide, and by moving the roll to and from the rope the amount or size of the fruit was regulated.

Q. 13. Were you familiar with the operation and work of that sizer that you have testified to?

A. Yes, sir.

Q. 14. Did you operate any of them?

A. Yes, sir. [369]

Q. 15. If so, where and when?

A. We have operated these sizers in the field, running the same with a foot pedal, in the early '90's.

Q. 16. Do you mean prior to 1892 or '3 or '4?

A. Prior to 1895.

Q. 17. For what length of time was this sizer in use in connection with the grading or sizing of fruit?

A. My recollection is that although there were two or three different types of machines, some in which there were rollers and some in which the grading was done by double ropes, it is our opinion that most of the sizers were of the rope-and-roller type, and along in the latter '90's they were almost universally used.

Q. 18. My question was for what length of time to your knowledge did the California sizer which you have designated as a sizer one member of which consists of a single stepped roller, continue in use?

(Deposition of George D. Parker.)

A. I should say for ten or fifteen years. Ten years, anyway. We might say here that in the earlier sizers in which there was only one roll, in which there were steps nine or ten in number, they were used until the output of the house made it necessary to have longer sizers, and I think as late as 1900 we have seen some of these in which there was only one roller in use.

(Question 18 read.)

Q. 19. You have stated in one of your previous answers that the California grader or sizer was also made in two rolls, and I would ask you to state when, to your knowledge, the use of a sizer with two rollers came into use? [370] A. About 1894 or '5.

Q. 20. And you also stated in one of your previous answers that they were made with three rollers, end to end. Can you state when the three-roll sizer came into use?

A. After using the single-roll sizer and making the same as long as we could, we found that it was not practical to have that longer than four or five feet on the outside, and about 1894 or '5 we cut the same in the middle, making two rollers. And as the output rapidly increased, we made it three rollers, until in about the year 1900 or 1899 they were making them mostly of three end-to-end rollers.

(Deposition of George D. Parker.)

Q. 21. Did you ever personally operate or examine or see in use sizers having embodied therein two or more end-to-end rolls as one of the sizing members? If so, when and where?

A. In the year 1899 we made several trips around through the country to the various packing-houses, and in nearly all of these, especially the larger ones, the California sizer was used with two or more sections of rollers end to end. These were in use in the Upland Citrus Association, located at Upland, California, the Pomona Fruit Growers' Association, located at Pomona, and the Parker Packing-house at Orange, California, and, in fact, nearly all the houses that packed any fruit had sizers of this kind, the California sizer being the one most used at that time.

Q. 22. When you say the California sizer was the one mostly used at that time, what do you mean by the California sizer most in use at that time?

A. This model on the table here represents the California sizer as used at that time. This is an exact reproduction of [371] that general type and is a model of the ones now in use at Pomona and Upland, and also there is one in the Benchley Fruit Company's house at Fullerton.

Q. 23. For what was this model that you have referred to constructed, or what do you know of its being constructed?

A. This model was constructed in my shop under my supervision as an exhibit in this case, being the best we could do to fully show the construction of

(Deposition of George D. Parker.)
the California sizer.

Q. 24. Is it a model of any of these working machines that were in use at any place? I mean, it is to represent any particular machine?

Mr. LYON.—Objected to as leading.

A. This is the general type of California sizer as used about 1895 to 1905, and is an exact reproduction of that type, and is similar to the one in use in the Pomona house at the present time. It also represents the California sizer in use by the California Citrus Association, with the exception only that the first section—

Q. 25. (By Mr. ACKER.) That model was made under your supervision? A. Yes, sir.

Mr. LYON.—Mr. Acker, if you will name the packing-houses at which you desire to claim the model here, marked “Model California sizer,” is to represent, I believe that we can stipulate as to it without any further proof.

Mr. ACKER.—Stipulate that this is one of the old type California machines in use in the packing-houses?

Mr. LYON.—Name the packing-houses and the date. [372]

Mr. ACKER.—Well, I would suppose that is a model of the old California sizer used at the Upland packing-house and likewise at Pomona.

Mr. LYON.—And that it was used with two and with three and sometimes with four sections of rollers or rollers, whichever you or he wish to term them, on each side of the run-way?

(Deposition of George D. Parker.)

Mr. ACKER.—That is correct,—and stepped.

Mr. LYON.—And each roller or section had two or more steps.

Mr. ACKER.—Two or more steps.

Mr. LYON.—And that the general diameter of the rollers and succeeding steps decreased about a quarter of an inch in diameter on each succeeding step as you proceed from the front end to the delivery end of the machine?

Mr. ACKER.—Yes, sir.

Mr. LYON.—And it might also be taken as stipulated between us that the manner of hanging or mounting the roller side of the run-way is and was practically the same in all of the said California graders which used more than one roller or section at the side.

Mr. ACKER.—And in use prior to the year 1900.

Mr. LYON.—And in use prior to the year 1900.

Mr. ACKER.—That stipulation is entered into between counsel, and the model to which the stipulation applies is introduced in evidence as Defendants' Exhibit Model California Sizer.

Q. 26. Did you supply the machine that is now used by the codefendant to this suit, namely, the Riverside Heights Orange Growers' Association?

[373] A. Yes, sir.

Q. 27. Was that sizer made under the protection of the patent accorded to you by the United States Government?

Mr. LYON.—The last question is objected to on the ground that it is leading and that it is incompe-

(Deposition of George D. Parker.)

tent, no foundation laid, the witness not having qualified to answer the question; and on the further ground that it is incompetent, no foundation laid, the witness not having qualified to answer the question; and on the further ground that it is incompetent and not the best evidence, calling for a conclusion of law and not the proper method of proof.

Mr. ACKER.—The question is withdrawn.

Q. 28. I hand you United States letters patent 997,468, granted G. D. Parker, July 11, 1911, for improved fruit sizer or grader, and ask you if you are the Parker referred to? A. Yes, sir.

Q. 29. Is the machine which you manufactured and sold to the Riverside Heights Orange Growers' Association constructed in accordance with the invention set forth in said letters patent?

Mr. LYON.—Objected to as calling for a conclusion of the witness and not for a statement of fact; objected to as leading and as incompetent and not the best evidence; the question calls for, evidently, whether the invention is set forth in said letters patent. And if counsel understands that the question means the mechanical embodiment shown in the drawings and described in the specifications of said letters patent, the witness may answer the question free from objection, the objection being more particularly to point out to the Court [374] that the conclusions as to whether the particular invention is embodied in the machine, is for the Court to determine. A. Yes, sir, it is.

Q. 30. (By Mr. ACKER.) Have you a model

(Deposition of George D. Parker.)

representing the device as installed by you in the packing-house of the Riverside Orange Growers' Association? A. Yes, sir.

Q. 31. Please produce it. (The witness produces a model.) Is this model which you produce a model of the apparatus installed by you at the packing-house indicated in the former question?

Mr. LYON.—Objected to as leading.

A. Yes, sir.

Q. 32. (By Mr. ACKER.) By whom was the model made, Mr. Parker, and where and when?

A. It was made in my shop under my instructions. It was made several months ago for the purpose of an exhibit in this suit.

Q. 33. Does it correctly disclose the apparatus as installed by you at the packing-house of the Riverside Orange Growers' Association?

Mr. LYON.—Objected to as leading.

A. Yes, sir.

Q. 34. (By Mr. ACKER.) Have you a photograph disclosing the apparatus installed by you in the packing-house referred to in my previous question?

A. That photo correctly represents the installation.

Q. 35. This is a photograph of a machine installed by you? [375]

A. Yes, sir; installed by me in that packing-house.

Q. 36. When was that photograph taken?

A. I can't state the exact date.

Q. 37. Approximately?

(Deposition of George D. Parker.)

A. Several months ago.

Q. 38. Was it done under your supervision?

A. Yes, sir, under my supervision.

Mr. ACKER.—I shall introduce that in evidence and ask that it be marked “Defendants’ Exhibit Photograph of Parker Sizer Installed in Packing-house Riverside Orange Growers’ Association.”

Mr. LYON.—We object to the photograph on the ground that it is incompetent, no proper foundation has been laid; and on the ground that it is incompetent and not the best evidence, and subject to our cross-examination, as there is evidently a discrepancy to a certain extent, at least, between this photograph and those produced on behalf of complainant and marked “Complainant’s Exhibit Photos Nos. 1, 2, 3, and 4.”

Q. 39. (By Mr. ACKER.) Of what was the photograph taken?

A. The Parker sizer.

Q. 40. Was it taken from the sizer as installed in the packing-house?

A. Yes. That correctly represents all my sizers.

Q. 41. The question is, was that a photograph of the sizer as installed by you in the packing-house of the Riverside Orange Growers’ Association?

A. Yes, sir. I think, maybe, this may be of another house; but they are identical.

Q. 42. Have you in your possession a photograph of the [376] sizer as installed in the house which I have called your attention to, and taken of that machine?

(Deposition of George D. Parker.)

Mr. LYON.—Let me ask you one question to clear this matter up. With the permission of counsel I will ask Mr. Parker this question:

Q. 43. If in the Riverside Orange Growers' Association packing-house at Riverside, there have been more than one Parker grader? A. Yes, sir.

Q. 44. And the original machines or machines that you first put in there have been partially rebuilt?

A. They have not been rebuilt.

Q. 45. Explain what you mean by that. Give us a direct answer. There is a difference between the photographs that we have produced in behalf of the complainant and the one you are referring to. Now, originally, the first machine that you put in for the Riverside Heights Orange Growers' Association, was like these four photographs, was it not? And wasn't it changed? I want to stipulate, if I can, that photograph that you first produced, but I want to know the history of it, that is all.

Q. 46. (By Mr. ACKER.) Examine these, as Mr. Lyon has asked the question.

A. The first sizer we put out had an individual adjustment for the roller which was a cap-screw on either end.

Q. 47. Is this photograph that you hand me a photograph of the machine as installed by you at the packing-house of the Riverside Orange Growers' Association?

A. As installed in that house, yes. I don't know. I [377] think that is not of that particular—

Q. 48. Have you one of the machine as installed?

(Deposition of George D. Parker.)

A. This is not of the one in the house.

Q. 49. Have you one in the house of the Riverside Heights Orange Growers' Association?

A. This photograph is the one.

Mr. ACKER.—I offer this photograph and ask that the same be marked Photograph Parker Machine installed in the Riverside Heights Orange Growers' Association packing-house, and I will say to counsel if he has any questions to ask before it is introduced he can ask them at this time. I ask that this be marked Defendants' Photo of Machine installed at packing-house of Riverside Heights Association.

Mr. LYON.—Read that question of mine and if I can get a yes or no, it will answer the whole thing. (Question read.)

A. The adjustment to the sizing portion now has one screw, while at that time it had one on either end. In the end view Complainant's Exhibit Photo No. 1, the sprocket chain shows. We now rivet these together, with the belt covering up the sprocket chain, or the two edges abutting.

Q. 50. (By Mr. LYON.) And in the model which has been offered in evidence the chain is illustrated by the leather belt underneath the two canvas belts, is it not? A. Yes, sir.

Mr. LYON.—I haven't any objection. I guess that is correct.

Q. 51. (By Mr. ACKER.) What is the reason for the changing of the style of adjustment in the rolls to which you have referred? [378]

(Deposition of George D. Parker.)

A. To make it handier. One screw is all that is necessary to operate in the present model.

Q. 52. That is, you substituted a single thumb-screw bearing in the middle, for the two screws that you had originally? A. Yes, sir.

Q. 53. How does the adjustment appearing in the letters patent granted you for your invention, the same being United States letters patent 997,468, appear? A. One in either end.

Q. 54. And does that change make any difference in the operation or the principle of operation in the machine?

A. None, further than that it is a little handier.

Q. 55. As a grader it makes no difference?

A. None whatever.

Q. 56. Please examine the model exhibit before you, and state whether or not it discloses in the fruit grader the combination of a plurality of independently transversely adjustable rotating rollers, a non-movable grooved guide lying parallel with the plane which passes vertically and longitudinally through the center of said rollers, said rollers and guide forming a fruit run-way, a rope in the groove in said guide, and means to move said rope, the same being claim No. 1 of the reissue letters patent in suit, and claimed to be infringed by the Parker machine.

Mr. LYON.—Objected to as calling for an interpretation of a claim in the patent, which is the province of the Court to construe and not a proper subject matter of even expert testimony. On the further ground, that it is incompetent, [379] no

(Deposition of George D. Parker.)

foundation laid, the witness not having qualified to answer the question, and generally as incompetent and calling for a conclusion of the witness and not for a statement of fact; and that it is leading.

A. No, sir.

Q. 57. (By Mr. ACKER.) Do you find in the model a disclosure of a transversely adjustable roller?

Mr. LYON.—The same objection as noted to the preceding question.

A. No, sir.

Q. 58. (By Mr. ACKER.) Do you find a non-movable grooved guide in the model?

Mr. LYON.—The same objection as noted to the preceding question.

A. No, sir.

Q. 59. (By Mr. ACKER.) Is there a rope disclosed by the model which moves or travels within a groove in the guide which lies parallel with the rollers?

Mr. LYON.—The same objection as noted to the preceding question.

A. No, sir.

Q. 60. (By Mr. ACKER.) Do you find in the model exhibit of the Parker machine any structural device conforming to the structural device called for by claim 1 of the reissue patent in suit?

Mr. LYON.—The same objection as noted to the preceding question.

A. No, sir.

Q. 61. (By Mr. ACKER.) Does the model ex-

(Deposition of George D. Parker.)

hibit disclose in [380] a fruit-grading machine a run-way composed of two parallel members, one of said members consisting of a series of end-to-end rolls, brackets carrying the rolls, guides for the brackets, and means for adjusting the brackets upon the guides?

Mr. LYON.—The same objection as to the preceding question.

A. No, sir; we don't find that.

Q. 62. (By Mr. ACKER.) Does the model exhibit disclose a grading member composed of end-to-end rolls?

Mr. LYON.—The same objection as noted to the preceding question.

A. No, sir.

Q. 63. (By Mr. ACKER.) Are you familiar with the structural arrangement of the sizer set forth and described in the reissue letters patent in suit?

A. No, sir.

Q. 64. Have you read the reissue letters patent in suit and do you understand the same?

A. Yes, sir; I understand the description of the same as covered by claims 1 and 10.

Q. 65. With your knowledge of the letters patent and the structural arrangement of the device disclosed thereby, and as called for by claims 1 and 10 of the patent, I will ask you to examine the patent, and, more particularly, claims 1 and 10 thereof, and state whether or not the exhibit Parker machine discloses a fruit grader conforming to the requirements of claims 1 and 10, or having the combination of the co-operating parts called for by said claims.

(Deposition of George D. Parker.)

Mr. LYON.—Objected to as leading, and incompetent, and being addressed to a matter which it is the province of the [381] Court to determine and not the proper subject of expert testimony, and as a question of law. Objected to further on the ground that it is incompetent, the witness not having qualified to answer the question, and upon the further ground that it calls for the mere conclusion of the witness and not for a statement of facts.

A. No.

Q. 66. (By Mr. ACKER.) What do you understand by the expression “end-to-end rollers” as used in the patent in suit?

Mr. LYON.—Objected to as incompetent; no foundation laid, the witness not having qualified to answer the question.

A. As shown and described, and as manufactured and used, this sizer is made for a roller, which is practically continuous; in which there is scarcely any space between the rollers.

Q. 67. (By Mr. ACKER.) What do you understand by the expression “end-to-end rollers”?

Mr. LYON.—The same objection.

A. Absolutely no space between the end of one roller and the beginning of another. The fruit passing from one roll to the other without any space between the same.

Q. 68. (By Mr. ACKER.) How do the rollers in the model exhibit California sizer appear?

A. They are end to end, and, as it were, abutting, without any appreciable distance between.

(Deposition of George D. Parker.)

Q. 69. How does the end-to-end arrangement of rollers in the California sizer model conform to the end-to-end arrangement as disclosed by the letters patent in suit? A. They are identical. [382]

Q. 70. How does the operation of the coating parts in the Parker machine as illustrated by the model exhibit compare with the operation of the working parts of the sizer of the patent in suit?

A. They are entirely different, and are adjustable longitudinally of the sizer, each roller being a distinct sizer, independent of all the others, the sizer or opening for the fruit conforming to the sizes on the run of the fruit. The sizing portions may be any distance apart longitudinally of the sizer. In the Strain or Stebler sizer the rollers abut or form a continuous roll from end to end.

Q. 71. What purpose is accomplished by the longitudinal adjustment permitted in the Parker machine of the sizing units?

A. In sizing for fruit at different seasons of the year, they run to an excess of one size, making it necessary that the bins be adjustable where the fruit may run a large proportion of one size. Of late years it has been necessary to have what they style an adjustable bin. In the Parker sizer we adjust our sizing member longitudinally to conform with the run of the fruit, and the run of the fruit determining the size of the bins holding the same. This makes a *very flexible* if one might use that term, adjustable of the bins, allowing a large variation in the size of the same. In this machine, constructed as it

(Deposition of George D. Parker.)

is, we get about fifty per cent more bin-room in relation to the floor space occupied than is gotten by the Strain or Stebler sizer of the present style as manufactured and installed. The adjustable bin feature is the principal reason for any changes in the equipment of the ordinary house as equipped for packing fruit. The outputs of [383] the same increasing from year to year, and as installed by the Strain sizer made in lengths up to 40 feet, there was no provision made for the adjustment of bins, it not being practical to make the sizers longer, and the packing-house people were calling to some extent for some of the advantages of the overhead or elevated California sizers, in which the fruit was allowed to roll down inclined chutes or roll-ways, and could be switched from one portion of the bins to another. In this switching or adjustable bin feature, it allows more packers to pack in a given floor space, and by making the bins larger, to hold any particular fruit which may be running to an excess, it allows more packers to pack from that particular size of fruit.

Q. 72. What is the purpose of the rolls or rollers appearing in connection with the grading units of the Parker device as disclosed by the model exhibit?

A. They are buffers or cushions which relieve the tension or binding of the fruit as it is being sized.

Q. 73. Are you familiar with the construction and operation of the Stebler sizer as utilized in the pack ing-houses, and by the Stebler sizer, I mean the sizer conforming to the sizer in the letters patent in suit?

A. Yes.

(Deposition of George D. Parker.)

Q. 74. What provision, if any, is made in the Stebler sizer to vary the run of fruit to any given bin or to permit of the adaptability or adjustment of the bin to the run of various sizes of fruit?

A. There is none.

Q. 75. Have you read the testimony given by Fred Stebler [384] in connection with the present suit?

A. Yes, sir.

Q. 76. What have you to state regarding the use of filler-sticks referred to by Mr. Stebler in his testimony?

A. We do not see how the same could be used, and the sizer utilized in its entirety.

Q. 77. What do you mean by "not utilized in its entirety"?

A. If we use a filler-stick we lose that grading space.

Q. 78. Do you know of any instance where filler-sticks have been employed in connection with the Strain sizer? A. I do not.

Q. 79. How are the end-to-end rollers which constitute one grading member of the Stebler sizer operated?

A. They are driven by a belt and continuously driven.

Q. 80. Are they driven by a belt common to all of the rollers?

A. Each roller having a belt driven from a common driving-shaft running the entire length of the machine, and a pulley to correspond with each roller.

Q. 81. Are you sufficiently familiar with the oper-

(Deposition of George D. Parker.)

ation of the Stebler sizer to state what the effect will be in connection with the sizing of fruit if the power-belt of any given grading roller should be removed?

Mr. LYON.—Objected to as leading, calling for the conclusion of the witness and not for a statement of facts.

A. Yes, sir. The moment the belt flies off or breaks and the roller is not driven, the fruit will immediately clog up and cease to size properly.

Mr. LYON.—I move to strike out all that portion of the [385] answer to the preceding question following the words, “Yes, sir,” from the record, and exclude it from consideration, on the ground that it is not responsive to the question. On the further ground that it is incompetent, no foundation laid, the witness not having qualified to answer the question.

Q. 82. (By Mr. ACKER.) Have you personally examined any Stebler machine in operation where the drive-belt of the rollers or any of the rollers of the series of rollers have been removed during the operation of the sizing of fruit?

Mr. LYON.—Objected to as leading.

A. Yes, sir.

Q. 83. (By Mr. ACKER.) When and where, and please state what the result of that examination was.

A. I have gone several times since hearing Mr. Stebler’s testimony along that line, and in the Upland Citrus Association house we threw off the belt, and the fruit immediately stopped feeding. We have done the same thing in the Pomona Fruit Growers’ Exchange, and numbers of other houses.

(Deposition of George D. Parker.)

Q. 84. When you say "we," what do you mean?

A. I say "we" quite often when I mean "I."

Q. 85. In your last answers, by the expression "we," do you refer to yourself personally?

A. I mean "I."

Q. 86. Do you know of any instance where the Stebler sizer is placed in packing-houses for the sizing of fruit, wherein the end-to-end rollers are not power-driven rollers?

A. I never knew one of the Stebler or Strain sizers which was not equipped with belts for each roller without the roller being mechanically turned. This holds good in the old [386] California sizer of years ago. They both operated the same way and must be driven continuously, else they are not operating.

Q. 87. Is there any provision made in the Parker device as manufactured, sold and installed by you, for power-driven rolls other than the end rolls, for the propelling and separating fruit? A. No, sir.

Q. 88. What purpose is served by the power-driven end-to-end rollers in the Stebler sizer?

A. They must be driven turning the rolls upward to allow the rope or movable member to feed or carry the fruit along, propelling the same successively to the several rolls.

Mr. LYON.—I move to strike the answer from the record and exclude it from consideration as not responsive to the question.

Q. 89. (By Mr. ACKER.) What do the end-to-end rollers in the Stebler machine constitute?

(Deposition of George D. Parker.)

A. They constitute one continuous roll, as it were; no space of any moment being between the ends of the adjacent rolls, the same abutting end to end.

Q. 90. Would it be practical to arrange the rollers of the Stebler sizer a distance apart and produce a practical successful grader for the fruit?

Mr. LYON.—Objected to on the ground that no foundation is laid, the witness not having qualified to answer the question; that it is calling for a mere conclusion of the witness and not for a statement of facts; and objected to on the ground that it is leading.

A. No, sir.

Q. 91. (By Mr. ACKER.) Please give the reason for your last [387] answer.

Mr. LYON.—The same objection.

A. If you separate by any distance the second roller from the first one—any distance larger than an orange—all the oranges would fall into the bins and go no further.

Q. 92. (By Mr. ACKER.) What distance apart are the rolls in the Parker sizer as constructed and installed by you?

A. They may be any distance apart. We have seen the same several feet apart.

Q. 93. What is the normal distance to which they are separated one from the other?

A. Two feet, more or less.

Q. 94. That term “more or less” is a little indefinite. I want the normal distance or average separation.

A. About two feet would be right; two feet or

(Deposition of George D. Parker.)

thirty inches. This can be varied at will to correspond with the run of the fruit.

Q. 95. Is it ever varied to such an extent that the rollers are end-to-end rollers? A. No, sir.

Q. 96. Do the rollers in the Parker machine as constructed and installed by you constitute one member of a run-way for the fruit?

Mr. LYON.—Objected to as leading.

A. They form an opening which allows all fruit smaller than that opening to pass beneath. But the fruit that is larger than that passes onto the next roller.

Q. 97. (By Mr. ACKER.) How is the weight of the fruit taken care of in the Parker machine?
[388]

A. In the Parker sizer we carry the fruit on a belt, on a slight incline and about eighty-five or ninety per cent of the weight of the fruit is carried by the belt, there being very little tendency to crowd through one of the rolls, the incline being just enough so that the fruit when it reaches its particular size will roll under the sizing member or cushion, as it were.

Q. 98. Does it hold good as to the Stebler sizer?

Mr. LYON.—Objected to as leading.

A. In the Strain sizer the propelling or rope member is carried in a groove. In this construction when the fruit reaches an opening very nearly large enough to allow it to pass through, the entire weight of the fruit tends to force itself through the opening, and were it not for the fact that the roller is rotating

(Deposition of George D. Parker.)

continuously the fruit would be injured very badly.

Q. 99. (By Mr. ACKER.) How are the end-to-end rollers in the Stebler sizer adjusted relative to the propelling members of the fruit?

A. They are adjustable horizontally to and from.

Q. 100. By "horizontal" do you mean transverse of the machine? A. Yes, sir.

Q. 101. How are the rolls appearing in the grading units of the Parker machine adjusted?

A. They are adjustable vertically.

Q. 102. I understand you to state that the purpose of the adjustment allows the rolls so to increase or decrease the aperture for the escape of the fruit?

[389] A. Yes, sir.

Q. 103. Does that hold good as to the Stebler adjustment as well? A. Yes, sir.

Q. 104. Does that apply equally so to the adjustment permitted on the end-to-end rolls of the California sizer as indicated by the model exhibit?

A. There is no adjustment of the rollers endwise of the Stebler or Strain sizer. These rollers are non-movable longitudinally, but abut end to end and are not adjustable lengthwise.

Q. 105. I think you misunderstood the question. The question is whether the adjustment permitted the rolls was for the purpose of increasing or decreasing the aperture for the escape of the fruit?

A. In both sizers?

Q. 106. Yes. A. Yes, sir.

Q. 107. Does that hold good also as to the California sizer? A. Yes, sir.

(Deposition of George D. Parker.)

Q. 108. Is the adjustment of the rolls to increase or decrease the aperture common to all fruit-graders employing adjustable rolls?

Mr. LYON.—Objected to as leading and not the best evidence, and no foundation is laid for the introduction of secondary evidence.

A. A sizer would be no sizer if there was not some means of regulating the apertures for the fruit to pass through. And [390] in the earlier sizers of all makes, there were adjustments of this nature.

Q. 109. (By Mr. ACKER.) Has the Parker sizer gone into extensive use in this district?

Mr. LYON.—Objected to as incompetent, calling for the conclusion of the witness, and not a statement of facts, and leading.

A. Yes, sir; very much so. In the past fifteen months we have put in equipment that will handle about twenty-five per cent of the total output of oranges.

Q. 110. (By Mr. ACKER.) How does the use of the Parker sizer compare with the use of the Strain or Stebler sizer?

Mr. LYON.—Objected to as calling for the conclusion of the witness and not for a statement of facts.

A. One step farther along possibly, if I might put it so, in the development of the equipment for handling citrus crops, and are considered by those using them to be superior to the former rope-and-roller type. We have installed in the leading houses, such as consider themselves about the most up-to-date—C. C. Chapman of Fullerton, and the Elephant house of Redlands—

(Deposition of George D. Parker.)

Q. 111. (By Mr. ACKER.) It will not be necessary to specify the names of all the houses.

A. And several other of the up-to-date packers who make a specialty and are extremely particular in their equipment.

Mr. LYON.—I move to strike out the last answer from the record and exclude it from consideration on the ground that it is not responsive to the question, and upon the ground stated in the objection to the previous question.

Q. 112. (By Mr. ACKER.) Have any of the Stebler sizers been [391] replaced or supplemented by the Parker sizers?

Mr. LYON.—Objected to as leading.

A. Yes, sir; we have put ours in place of a few of the Strain sizers.

Q. 113. (By Mr. ACKER.) Do you know of any case where the Parker sizer has been replaced by the Stebler sizer?

Mr. LYON.—Objected to as leading.

A. No, sir.

Q. 114. (By Mr. ACKER.) What have you to state concerning the testimony of Mr. Stebler that his sizer has supplanted the former sizers that were used in Southern California?

Mr. LYON.—Objected to as not a proper method of proof. The witness should state facts and not merely what he has to say about it.

A. Mr. Stebler in the furnishing of packing-house equipment purchased the California or rope-and-roller sizer or an interest in the same, and later pur-

(Deposition of George D. Parker.)

chased the Strain sizer, and he has furnished most of the equipment in later years, until a great many of his rope-and-roller sizers were in use. He controlling or manufacturing the sizers has made and sold more of the Strain sizers than any other. He being the manufacturer and sole owner, could sell what he pleased, to a large extent.

Q. 115. (By Mr. ACKER.) Was Mr. Stebler the owner or controller of the California sizer?

A. He really was. I think he so stated in his testimony that he had purchased that from some San Francisco party.

Q. 116. Do you know whether Mr. Stebler ever manufactured and placed upon the market what has been termed the California sizer? [392]

A. Yes, sir.

Q. 117. Do you know if he continued the manufacture to any extent *to* the California sizer after acquiring the control of the Strain patent or the patent in suit?

Mr. LYON.—Objected to as leading.

A. He may have made some, but not many.

Q. 118. (By Mr. ACKER.) To what type of sizer have his efforts been directed of late years, or can you state?

Mr. LYON.—Objected to as assuming facts not appearing from the testimony, either of this witness or any other witness in the case, that Mr. Stebler's efforts, whatever may be referred to in the question by that term, have been directed to the selling of any particular grader; and the further objection is made

(Deposition of George D. Parker.)

that it is incompetent, the witness not having qualified to answer the question; and it calls for the mere conclusion of the witness and not for a statement of facts.

A. From our knowledge of what has been installed by him, they have been almost exclusively of the Strain type.

Q. 119. (By Mr. ACKER.) By "Strain" do you mean the type of the patent in suit?

A. Strain or Stebler—the patent in suit.

Q. 120. Can you state whether any provisions are made in the Stebler sizer to accomplish the functions carried out in the Parker machine by the longitudinal adjustment permitted the sizing units?

Mr. LYON.—Objected to as incompetent, no foundation laid, the witness not having qualified to answer the question, and calling for a mere conclusion of the witness and not for a statement of facts, and that it is leading. [393]

A. No, sir; there is absolutely none, nor can it be.

Q. 121. (By Mr. ACKER.) What provision is made in the Stebler sizer for the adjustable bins?

Mr. LYON.—Objected to as leading and on the further ground stated in the preceding question.

A. None whatever.

Q. 122. (By Mr. ACKER.) Did I understand you to say that any of the California sizers, that is of the type illustrated by the model exhibit California sizer, are in use at the present time?

Mr. LYON.—Objected to as leading.

A. Yes, sir.

(Deposition of George D. Parker.)

Q. 123. (By Mr. ACKER.) Can you give the names of the packing-houses in which some of them are used?

A. The Upland Citrus Association at Upland; the Pomona Fruit Growers' Exchange at Pomona; the Benchley Fruit Company at Fullerton; the Parker—or rather, the house in which Mr. Parker used to pack—at Orange. I think the house is called the E. T. Parker house, or was called that at one time. There is also one at the Randolph Fruit Company at San Dimas.

Q. 124. During the course of the examination presented on behalf of Fred Stebler, the complainant herein, there was introduced for identification a photographic print. I will ask you to examine the same and state what you know concerning that print, if you can identify it in any manner.

A. This print was taken in the Upland Citrus Association at Upland, and represents one of their California sizers which was in use prior to Mr. Stebler removing the same and putting in its place one of the Strain type of sizers. This sizer is [394] one which had been in use a number of years, and this photograph was taken in my presence by my photographer about a year and a half ago, as near as my recollection serves me.

Mr. ACKER.—I now introduce the print in evidence and ask that it be marked Defendants' Exhibit Photo Upland Machine, Knight's Cross-examination.

Mr. LYON.—Objected to as irrelevant, immaterial and incompetent, and no foundation laid.

(Deposition of George D. Parker.)

Q. 125. (By Mr. ACKER.) Have you read the testimony of Mr. Knight which was given on behalf of the complainant Stebler? A. Yes, sir.

Q. 126. Do you agree with the testimony of Mr. Knight that the rollers disclosed in the photo exhibits as submitted to you are end-to-end rollers?

Mr. LYON.—Objected to as leading, irrelevant and immaterial.

A. Yes, sir; they are end-to-end rollers.

Q. 127. (By Mr. ACKER.) And to that extent you agree with Mr. Knight's testimony?

Mr. LYON.—The same objection.

A. Yes, sir.

Q. 128. (By Mr. ACKER.) I hand you Defendants' Exhibit Photo Upland Sizer and Defendants' Exhibit Parker Packing-house Sizer, and ask you to examine the same and state whether you can relate what is disclosed thereby, by whom they were taken, and when, and what apparatus they portray.

A. The Upland print shows a California sizer one member of which is composed of three end-to-end rollers, the rope running in a grooved guide, brackets for the rollers, and [395] adjustment for the brackets. This photograph was taken at the same time the others were taken.

Q. 129. Referring to Defendants' Exhibit Photo, Knight's Cross-examination? A. Yes, sir.

Q. 130. Now, tell when the other one was taken, if you know.

A. The print of the Parker packing-house sizer was taken in the Pomona Fruit Growers' Exchange

(Deposition of George D. Parker.)

about a year ago by my photographer.

Q. 131. Do you know that they correctly represent the apparatus portrayed thereby?

A. They correctly represent the two machines as used in these houses.

Q. 132. With the exception that the Parker machine and the Strain or Stebler machine grade or size fruit, what features are there in common in the two machines so far as the working parts are concerned? A. These two machines represent—

Q. 133. I am not talking of the photographs.

A. There is absolutely nothing in common outside of the fact that they do size oranges.

Q. 134. Is that the common function of all fruit sizers or graders? A. Yes, sir.

Q. 135. Have you read and do you understand letters patent of the United States No. 671,646, granted to R. P. Bailey, April 9, 1901, one of the exhibits in this case, relating to a fruit grader? [396]

A. Yes.

Q. 136. Can you state what provisions are made for the sizing of the fruit in the machine disclosed by the letters patent?

A. In this there is a continuous sectional roller opposing a parallel member or propelling member. There appears to be provision for adjustment of the rollers to and from the traveling member, and appears to have all the adjustments necessary for the proper handling of fruit, the rollers being end-to-end and parallel to the movable member.

Q. 137. Does the patent disclose independent ad-

(Deposition of George D. Parker.)

justment for the various sizes or grades of fruit?

Mr. LYON.—Objected to as leading, not the best evidence, and the patent speaks for itself.

A. Yes, sir. In each one of these sections are adjustments on either end for the support of the rollers, or bearing, as it were. These are independently adjustable to and from the moving or propelling member, and running parallel to the same.

Q. 138. (By Mr. ACKER.) What purpose do the rolls disclosed by that patent serve?

A. They are freely turnable upon their rods and which form a continuous contact for the sides of the fruit, which resting upon the inclined bottom surfaces will also contact against these loose rings or discs, the movement of the fruit rotating upon the traveling member, and will tend to roll these discs or rolls upwards, and free or relieve the fruit from any tension or bruising effects.

Q. 139. How does that compare with the function of the [397] rotatable feature of the rolls of the Parker device?

A. Apparently for the same purpose.

Q. 140. Would they serve the same purpose?

Mr. LYON.—Objected to as leading and incompetent, no proper foundation laid, the witness not having qualified to answer the question.

A. Apparently for the same purpose, and to keep the fruit from being damaged.

Q. 141. (By Mr. ACKER.) How is the adjustment for varying sizes of fruit provided for in the patent which you have referred to?

(Deposition of George D. Parker.)

A. The adjustments are by screws on either end of the supports or brackets for the bearings, and are adjustable to and from the movable member, each section being entirely independent in its adjustment from the adjacent roll.

Q. 142. Does the patent disclose a fruit grader, one member of which comprises an end-to-end roll?

Mr. LYON.—Objected to as leading, incompetent, not the best evidence, and that the patent speaks for itself.

A. I think I said formerly that it constituted a series of end-to-end rollers, each of these being adjustable to and from the movable member.

Q. 143. (By Mr. ACKER.) Are those rollers adjustable to or from a movable member in the horizontal plane or vertical plane?

A. In the vertical plane.

Q. 144. How does the adjustment disclosed by said patent conform to the adjustment provided for in your machine, so far as varying the aperture for the fruit? [398]

A. It is adjustable vertically, and in that respect is the same, inasmuch as it is adjustable. Any sizer must have some adjustment.

Q. 145. Does not the patent describe an adjustment for the grade spaces for sizing?

Mr. LYON.—Objected to as leading.

A. Yes, sir; it describes them as slotted adjustable plates, whereby the spaces between the rings or discs on the lower edges of the plates may be regulated.

Q. 146. (By Mr. ACKER.) As a fruit grader,

(Deposition of George D. Parker.)

how would a device constructed in accordance with said letters patent compare with the Stebler fruit grader in suit?

Mr. LYON.—Objected to as incompetent, no foundation laid, the witness not having qualified to answer the question.

A. It would answer all the purposes, all the claims of either one. They are all made continuous, end to end, the rolls being, as it were, built up of a number of small discs formed in rolls. Each roll being carried on a bracket and adjustable, the ends of the rolls being continuous.

Q. 147. (By Mr. ACKER.) Would the grading units, or rather, sizing units disclosed by said patent be adjustable independently of each other?

Mr. LYON.—Objected to as leading.

A. We have so stated in our other answer, we think, and they are adjustable independently of each other.

Whereupon the further taking of testimony herein was adjourned until Wednesday, May 1, 1912, at 10 o'clock A. M., at the same place. [399]

On Wednesday, May 1, 1912, at 10 o'clock A. M., the further taking of these depositions was resumed, pursuant to the adjournment.

Whereupon GEORGE D. PARKER was recalled and direct examination resumed, as follows:

Q. 148. (By Mr. ACKER.) In order that the record may be clear, I ask you to examine the model Parker machine and state the purpose or function of this belt which appears to be below the canvas con-

(Deposition of George D. Parker.)

veyor, midway in the model, and state whether or not in the machine as installed, the said part consisted of a belt or a chain or rope?

A. Referring to this belt in the model, it performs no function so far as the sizing is concerned, but is only to hold the belt or propel the same.

Q. 149. You say in your answer "this belt," meaning what? Do you mean the member which travels in the grooved run-way in the model?

A. Yes, sir.

Q. 150. What is the purpose of that?

A. Only to hold the wide belt in place.

Q. 151. Are the wide belts attached to that driving belt? A. Yes.

Q. 152. And is the sole function of the underlying belt for imparting travel to the canvas belts?

Mr. LYON.—Objected to as leading.

A. Only to hold the belt in place. That is all. In the first machine put out we used a chain for pulling the belt [400] along, but this chain has nothing to do with the sizing of the fruit, and is only used to propel.

Q. 153. Does it serve any other purpose than a driving connection?

Mr. LYON.—Objected to as leading.

A. We have said before that it tended to hold the wide belt in a straight line, but the sizing has no connection with the chain.

Q. 154. With that exception, does the model correctly represent the sizer as installed by you, manufactured, sold and installed?

(Deposition of George D. Parker.)

Mr. LYON.—Objected to as leading.

A. Yes, sir.

Q. 155. (By Mr. ACKER.) What does the outer member of the Parker sizer consist of?

A. It consists of a number of units or sizing portions adjustable lengthwise of the grader, and having overlapping fingers or guides to allow the adjustment lengthwise.

Q. 156. When you say “adjustable units,” do you mean adjustable rollers?

Mr. LYON.—Objected to as leading.

A. Yes; there is a roller in the sizing unit or cushion as it were which is intended to regulate the size of the fruit passing through the aperture.

Q. 157. You were asked by counsel for complainant whether you had not made a change in the model so far as relates to the adjustment—the vertical adjustment of the rotating member of the grading unit—from the form of adjustment as originally installed by you. And I will ask you whether you [401] have any device which will more clearly disclose the form of adjustment as originally installed by you in connection with your sizers. A. Yes.

Q. 158. Please produce it. (The witness produces device.) Does this device which you have produced represent one of the grading units as originally installed by you, so far as relates to the adjustment of the rotating member of the grade unit?

A. Yes, sir. This is exactly as the first machine was installed in the Riverside Heights house.

Q. 159. Are all the parts of that unit present?

(Deposition of George D. Parker.)

A. Yes, sir.

Q. 160. How is that unit arranged relative to the adjacent unit of the sizer?

A. By the overlapping fruit guides.

Q. 161. Can you attach what you term "fruit guides" to the grade unit? A. Yes, sir.

Q. 162. Please do so. (Witness does as requested.) How does the unit before you with these guides attached thereto differ from the grade unit of the model exhibited, if at all?

A. Only in the adjustment.

Q. 163. What do you mean by "only in the adjustment"?

A. In our original machine as installed in the Heights, we used one separate screw for either end, and in all other later machines we used one screw in the center for adjusting both ends simultaneously.

Q. 164. And as disclosed by the model exhibit?

A. And as disclosed by the model. [402]

Mr. ACKER.—I offer the device to which the witness has testified in evidence, and ask that the same be marked "Defendants' Exhibit original Parker Grade Unit."

Q. 165. (By Mr. ACKER.) In the testimony which has been given in this case on behalf of the defendants, the name of the Parker packing-house has occurred several times. I will ask you if you are identified in any manner with the Parker packing-house. A. No, sir.

Q. 166. In the latter part of your answer to question 8, you stated as follows: "The Stebler or Strain

(Deposition of George D. Parker.)

sizer is identical, having the rope running in the grooved side, the rollers being power driven and continuously in motion. The earlier types, or, for that matter, all of the California sizers or nearly all have been replaced, although there are still some in use." I now ask you to explain just what you meant by that statement.

A. We intended to say that the California and Stebler or Strain sizer were identical.

Q. 167. When you say "we," do you mean "I" as explained yesterday in your testimony?

A. Yes, sir.

Q. 168. Are you fully acquainted with the operation of these sizers as used in the packing-houses?

A. Yes, sir; quite familiar.

Q. 169. Can you state how often during the operation of a sizer an adjustment is given to vary the outlet aperture for the escape of fruit?

A. Only between runs of different sizes or shapes of fruit— [403] such as navels or valencias or seedlings, which are different in shape, the shape of the orange having a great deal to do with the number packed in a box.

Q. 170. Is the adjustment of the outlet apertures a frequent one? A. No, sir.

Q. 171. After an initial adjustment given, is it common practice to change that adjustment during the grading of that run of fruit?

Mr. LYON.—Objected to as leading.

A. We think not.

Q. 172. (By Mr. ACKER.) Do you know?

(Deposition of George D. Parker.)

Mr. LYON.—The same objection.

A. The only reason for changing the size of the fruit would come with the changing of the kind of fruit, very little adjustment being necessary in the ordinary run of fruit.

Q. 173. (By Mr. ACKER.) Referring to the Strain patent—reissue letters patent in suit—I direct your attention to the following contained between lines 45 of page 1 of the specifications and ending with line 55, and ask what you understand by “longitudinal movement”?

Mr. LYON.—Objected to as incompetent and not the best evidence The patent speaks for itself, the witness not having qualified to answer the question.

A. Evidently to the longitudinal adjustment in the guide-blocks “O.” This would be towards or from the rope.

Q. 174. Would that constitute a transverse adjustment as called for by claim 1 of the patent in suit?

Mr. LYON.—Objected to as leading, and as incompetent and [404] calling for the interpretation of the claim which it is the province of the Court to interpret and not a proper subject matter of expert testimony, and as incompetent, no foundation laid, the witness not having qualified to answer the question.

A. Yes, sir.

Q. 175. (By Mr. ACKER.) Do you find any expression in claim 10 of the letters patent in suit calling for an independent adjustment of the end-to-end rollers?

(Deposition of George D. Parker)

Mr. LYON.—Objected to on each of the grounds stated in the objection to the preceding question.

A. No.

Q. 176. Do you know of any new or improved fruit grader having been placed into use in the southern district of California for grading fruit since the issuance of letters patent of the United States to you for your improved fruit sizer or grader?

Mr. LYON.—Objected to as leading and incompetent, calling for the conclusion of the witness and not for a statement of facts, and not the best evidence.

A. No, sir.

Q. 177. (By Mr. ACKER.) Then, as far as you know, your apparatus constitutes the last step in the art of fruit sizers or graders?

Mr. LYON.—The same objection is noted as to the preceding question.

A. Yes, sir.

Q. 178. (By Mr. ACKER.) I believe you stated yesterday that you had read the testimony of Mr. Fred Stebler, the complainant in the present action?

A. Yes, sir. [405]

Q. 179. Do you agree with Mr. Stebler that the sizer disclosed by "Defendants' Exhibit Photo Exhibit Knight's Cross-examination" does not illustrate a sizer, one member of which consists of a series of end-to-end rolls, brackets carrying the rolls, guides for the brackets and means for adjusting the brackets upon the guides?

Mr. LYON.—Objected to as leading and as incompetent and not the best evidence, the witness not hav-

(Deposition of George D. Parker)

ing qualified to answer the question, and not the best evidence, and that the exhibit speaks for itself. On the further ground that it is an apparent attempt to have the witness interpret the terms of claim 10 of the patent in suit and interpret the scope and meaning thereof, which it is the province of the Court to determine and not the proper subject of expert testimony. And upon the further ground that the witness is asked this question with relation to the literal wording of said claim 10 disassociated from the subject matter of the Strain reissue patent or the invention therein set forth or the drawings or descriptions therein contained.

A. No, sir; we don't agree with that.

Q. 180. (By Mr. ACKER.) When you say "we," do you mean "I"?

A. I do not agree with him. In this sizer there are three rollers end to end, brackets carrying the rolls, adjustments to the brackets, and appears to embody each and every one of the claims in the Strain patent.

Q. 181. I did not ask whether it embodied the claims of the reissue patent, but whether you agree with Mr. Stebler as to its not disclosing the elements which I have directed your attention to. [406]

Mr. LYON.—The same objection as to the preceding question.

Q. 182. (By Mr. ACKER.) My question having no reference one way or the other to the claims of the patent.

Mr. LYON.—The same objection.

(Deposition of George D. Parker)

A. No, sir.

Cross-examination.

(By Mr. LYON.)

Q. 183. In the photo exhibit Knight's cross-examination, there are shown how many sections or rollers forming the roller side of the fruit run-way?

A. Three rollers.

Q. 184. How many steps on each one of those rollers?

A. Some have two and some have three, and one of them four.

Q. 185. Each succeeding step is of smaller diameter than the step just preceding it?

A. Yes, sir.

Q. 186. Now, referring to the drawing and specifications of the patent in suit, is it not a fact that each one of the rollers shown and described therein has but one diameter?

Mr. ACKER.—The question is objected to as irrelevant, immaterial, incompetent; on the further ground that the patent itself is the best disclosure of the type of roller therein illustrated; and counsel is requested to point out to the witness in the specifications of the patent in suit wherein the reference, if any, is made to the uniform diameter of the rollers; and I instruct the witness that if he so desires, he can utilize the patent for the purpose of answering this question. [407]

Q. 187. (By Mr. LYON.) I am assuming that in the direct examination the witness was referring to the patent in suit and was familiar therewith. If he

(Deposition of George D. Parker)

is not, will he please so state? Are you or are you not familiar with the drawings and specifications of the Robert Strain reissue patent, the patent here in suit?

A. We are quite familiar with the machine as ordinarily put out.

Q. 188. You have not answered the question. (The question No. 187 is read.)

A. We have read them over.

Q. 189. Repeat the question to the witness. (The question No. 187 is read.)

A. We see no reference to those being of different diameters or whether they are stepped or not stepped.

Q. 190. How are they shown in the drawings?

A. Just a moment. We assume that as a matter of convenience, they were probably of one diameter.

Q. 191. How are they shown as a matter of fact in the drawings of the patent in suit?

A. To all appearances, they are of uniform size.

Q. 192. And they have been made of uniform diameter in all of the machines that have been built, have they not? A. No, sir.

Q. 193. What machines do you refer to in the last answer?

A. We cannot recall the particular house at this time, but we have seen them with more than one diameter on them.

Q. 194. When did you see that?

A. During the last year. [408]

Q. 195. When did you see that?

A. During the last year.

(Deposition of George D. Parker)

Q. 196. Where?

A. The Orange Heights Association at Corona, I think, had one that way. Also, there is one if not more in the Pomona Fruit Growers' Exchange, as this was the common practice until a year or two ago.

Q. 197. Who built the machines that you refer to?

A. Mr. Stebler, we suppose.

Q. 198. (By Mr. ACKER.) Mr. Stebler, the party complainant in this present suit?

A. Yes, sir.

Q. 199. (By Mr. LYON.) Describe the rollers which you refer to.

A. They were of two diameters, one smaller than the other.

Q. 200. Where was the smaller diameter roller located?

A. In some instances it was in the middle.

Q. 201. Was it not in all the instances that you refer to? A. No, sir.

Q. 202. Where was the machine erected and installed that did not have the smaller diameter in the center of the roll?

A. I do not recall which house, but I am sure that the last roll in a great many sizers has been turned down to a less diameter than the balance.

Q. 203. That would be the last roll on the runway? A. Yes, sir.

Q. 204. At the discharge end?

A. The discharge end, yes.

Q. 205. Do you know what the purpose of that was? [409] A. No.

(Deposition of George D. Parker)

Q. 206. Otherwise than that last roll on the machine that you refer to, other rolls that had more than one diameter had the smaller diameter in the center and the larger diameter at both ends of the rolls, did they not? A. Yes; we think that is correct.

Q. 207. Do you know what the purpose or function was of so making the rollers of the Robert Strain or Stebler grader, as it has been called both in the record and by you?

A. Possibly to get a shorter grading surface.

Q. 208. Is that the way you understood it?

A. Yes, sir.

Q. 209. As a matter of fact, wasn't that roll so built as to have a reduced diameter at the center and larger diameters at the ends so as to control the point of delivery or sizing of the fruit on the roll at the center of the roll? A. No, sir.

Q. 210. You swear to that, do you?

A. Yes, sir.

Q. 211. What function or operation did the portions of larger diameter of those rolls in such Strain or Stebler grader perform?

A. We think they were intended as conveyors to convey the fruit from one point to another or from one roll to another, rather than to deliver the fruit to any particular part of the bin. We mean the small turned portion now.

Q. 212. Were any of those rolls used to deliver two or more sizes of fruit on the same roll? And when I say "deliver" I mean separate or size. [410]

A. I don't know that they were so used, but they could be so used.

(Deposition of George D. Parker)

Q. 213. Did you observe carefully the operation of any such machines? A. Yes, sir.

Q. 214. What did you observe as to the manner of their operation in the respects referred to in the next to the last question I asked you? And I will ask the reporter to read that question to you in connection with this one. (Reporter reads question No. 212.)

A. We cannot say that these were ordinarily used for grading more than one size of fruit on each roll.

Q. 215. Did you ever see them used to grade more than one size of fruit on one roll? I am referring to the construction referred to in the last few questions. If so, state when and where and all the attendant circumstances. A. No; I do not recall any.

Q. 216. How long ago did you first see one of these Strain or Stebler graders with the independently individually adjustable rolls, having a portion of smaller diameter at the center roll, larger diameters of the roll being at each end?

A. Oh, it was quite common four or five years ago.

Q. 217. That was prior to the time that you commenced to work on the grader of the type that you put in for the Riverside Heights Orange Growers' Association at Riverside, was it not? A. Yes, sir.

Q. 218. What do you mean by your statement this morning that the Stebler or Strain graders and the California graders were identical? [411]

A. They are identical. The outer member of the California sizer as constructed along about 1900 having two or three or four sections forming a continuous run-way from end to end, and the Strain sizer

(Deposition of George D. Parker)

only differing in the number of rolls, as far as the patent is concerned, and it is our opinion that if someone had applied for a patent on the last California sizer, they would have been entitled to the same claim as the Strain patent in reference to claims 1 and 10.

Q. 219. And that is the basis of your entire testimony in this case?

A. We hardly understand what you mean by that question.

Q. 220. Your statement that the California grader, as made with two or three or four sections or rollers, each section or roller having two or more stepped portions of different diameters, was identical with the Strain or Stebler sizer as set forth in the patent in suit, is a fair example of the testimony given by you, is it?

Mr. ACKER.—The question is objected to as it is apparently an endeavor to place the witness in a position of stating that all testimony given in connection with the art of fruit graders is based on his understanding as to the similarity between the California grader and the Stebler grader. The testimony of the witness as between the structural device of the California and the Strain sizer being an opinion of mechanical structures, whereas the testimony of the witness relating to other matters in the case are on questions of fact and are not based on opinion of mechanical structure.

Mr. LYON.—We call the Court's attention at this point to the character of the answers given by this

(Deposition of George D. Parker)

witness, and [412] particularly, to his apparent insistence that the Stebler or Strain sizer or grader and the California grader are identical; and counsel for complainant is asking this particular question of the witness to draw his most emphatic attention to this particular statement, with the particular view of giving the witness an opportunity to show that he is able and willing to be frank and truthful and not to attempt to color his testimony in the case.

Mr. ACKER.—The latter portion of the statement by counsel is excepted to.

A. We have never used the term “stepped rollers.” The California sizer is in four sections or in nine sections, or in any number you please. It could have been manufactured in any number and still conform to the style of sizers then in use.

Q. 221. (By Mr. LYON.) I will ask that the question be re-read to the witness and that he answer it yes or no, as I have already pointed out the reason therefor.

Mr. ACKER.—I instruct the witness that if he answers the question yes or no, he may supplement the answer by any statement he desires.

Mr. LYON.—Which instruction is repeated on behalf of counsel for complainant, and it is requested of the witness that he make as full an explanation of any answer yes or no that he gives to this question as he may desire. (The question is read by the reporter.)

Mr. ACKER.—I instruct the witness that if he does not understand the question, he can call upon

(Deposition of George D. Parker)

counsel to illustrate what he means. [413]

A. I would be pleased to have you make it more clear just what you want me to say or what you are trying to have me not say.

Q. 222. (By Mr. LYON.) I am not trying to have you say anything or trying not to have you say anything. I am asking you to comply with your oath and testify the truth, the whole truth and nothing but the truth in this case. If you don't understand the question, please say so.

A. I don't catch your meaning.

Q. 223. What do you mean by the term "identical" when you say that the Stebler or Strain grader and California grader are identical?

A. This suit was brought under claim 1 and 10 of the Strain patent, and in these claims there is no mention of any such roller. The four rollers in the California sizer were adjustable to and from the rope, the same as in the Strain sizer.

Q. 224. Is that what you mean by saying that the Stebler or Strain grader and the California grader were identical?

A. The California grader is a continuous end-to-end roll sizer and, as constructed in 1900, these sections or rolls abutted in the same manner as the Strain sizer.

Q. 225. Is that what you mean by saying that the Stebler or Strain grader and the California grader are identical? A. Yes, sir.

Q. 226. And that is the basis of your testimony, that claims 1 and 10 of the Robert Strain reissue pat-

(Deposition of George D. Parker)

ent—the patent here in suit—contained nothing but what was in the California grader? Is that a fact?

A. That is my understanding. [414]

Q. 227. Please refer to the Strain patent, the patent here in suit, and read lines 43 to 55 inclusive, of page 1 of the specifications thereof, giving your attention in connection therewith to the drawings in such patent, and explain to me the adjustments therein set forth.

Mr. ACKER.—Objected to as immaterial, irrelevant, incompetent, unless by the question it is to be understood that the form of adjustment therein referred to is to be read into the claims 1 and 10 of the letters patent in suit, as the said claims 1 and 10 of the patent in suit constitute the invention alleged to have been infringed, and these are only a portion of a number of claims contained in the patent.

A. Apparently these rolls were to be adjusted to and from the belt by means of the two screws or threaded bolt “P” and the adjusting nut “S.”

Q. 228. (By Mr. LYON.) The form of belt shown in this Strain reissue patent in suit is a rope belt, is it not?

Mr. ACKER.—Counsel objects to the use of the word “belt” as embodied in the question of counsel of complainant.

Mr. LYON.—I call the Court’s attention to the fact that the witness himself used the word “belt” in this connection, and I object to the continued interruption in the cross-examination of this witness by counsel for the defendant under the guise of ob-

(Deposition of George D. Parker)

jections to instruct and coach the witness in his testimony.

Mr. ACKER.—Counsel for defendants excepts to the deliberate and wilfully false statement made by counsel for complainant.

A. Which belt do you have reference to?

Q. 229. (By Mr. LYON.) The belt that you have stated was the [415] one toward and away from which the rolls were adjusted by the bolts "P" and the nuts "S"?

A. Yes; the grading rope or belt, whatever you may term it.

Q. 230. These rolls "M" in this Strain patent are not adjustable longitudinally of this rope belt, are they? A. No, sir.

Q. 231. They are adjustable transversely of this rope belt, are they not? A. Yes, sir.

Q. 232. Referring now, Mr. Parker, to the Exhibit model of Parker machine, is it not a fact that there is another slight difference between this model and the machines as you make them other than those to which you have heretofore referred, and that is this: In the machines as you make them, are not the brackets carrying the rollers mounted at right angles to the flat conveyor belts in your machine?

A. This model is just as we make those sizing portions in the sizers put out by us.

Q. 233. Have you one of these separate brackets which you have placed on the graders manufactured by you, other than the first one, like Defendants' Exhibit Original Grade Unit, here, that you can pro-

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duce? A. Yes. (Witness produces a device.)

Q. 234. The article which you have produced is one of the actual brackets referred to?

A. Yes, sir.

Mr. LYON.—We offer this in evidence in connection with the cross-examination of the witness and ask that the same be marked “Complainant’s Exhibit Second Style Parker Bracket.” [416]

A. There is a slight difference in the inclination there, that is all.

Q. 235. The slight difference in the inclination that you have referred to is in the angle of the foot of the bracket in the exhibit last produced, from the angle of the foot of the brackets in the model?

A. In the Riverside Heights No. 10 machine we have brackets identical with this last exhibit in the first machine installed. Otherwise this model is as we manufacture them at the present time.

Q. 236. Then if the brackets on the model had the same angle or bend at the foot, would they not stand at right angles to the inclination of the flat belt?

A. They would.

Q. 237. And that is the way you build them in actual use?

A. That is the way the first machine was built.

Q. 238. And that is the way all of your machines are built at present?

A. No, sir. The model represents the present construction.

Q. 239. The machines in use by the Riverside Orange Growers’ Association have the brackets at right angles to the flat belt? A. One of them has.

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Q. 240. In both Defendants' Exhibit Original Grade Unit and the bracket last produced, the brackets are mounted in small castings which slide on the arms of the bracket, are they not?

Mr. ACKER.—I object to the use of the expression "Bracket," as the feature to which counsel is directing attention as a bracket, has heretofore been referred to by the witness as a grade unit. And I wish the same terms to be employed throughout [417] the deposition, so that the Court may not be confused.

Mr. LYON.—We object to the interruption of counsel on the grounds heretofore stated.

Mr. ACKER.—And the same objection is made to the statement as heretofore entered on the record.

Mr. LYON.—Mr. Reporter, let the record show that before answering this question the witness again takes up and apparently inspects the drawings and specifications of the patent in suit.

Mr. ACKER.—And counsel for defendants instructs the witness that he may pick up and examine the patent in suit at any time he desires and in answer to any question he may examine the patent.

A. They slide on the stand itself, if that is what you wish to call a bracket.

Q. 241. (By Mr. LYON.) And when these rolls slide in this manner and the brackets are permitted to remain in position, with reference to the frame of the machine, are the rolls moving longitudinally of the frame of the machine or are they moving trans-

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versely to the frame of the machine and to the belts?

A. They are moving vertically to and from the conveyor or belt.

Q. 242. What do you understand by the term "transversely"?

A. I am not much on Webster, but if you give me Webster I might answer the question.

Q. 243. Is that the best answer you can give to the question?

A. In the Strain sizer they are moved transversely in a horizontal movement.

Q. 244. And the rolls in your machine are moved transversely [418] with respect to the carrying belt when such rolls are moved vertically in the standards or brackets in which they are mounted?

A. They are moved to and from the conveying belt, this movement being similar to all sizers manufactured since 1890.

Mr. LYON.—I move to strike out the answer from the record and exclude it from consideration on the ground that it is not responsive to the question, and I ask that the question be re-read to the witness and that he answer it yes or no.

A. They are moved to and from the belt. We do not think it makes any difference, just so they are moved to and from.

Q. 245. Will you answer now my question, which is this: Is the movement of the rolls when moved toward or from the traveling belt in your machine a movement transversely of the belt, as you understand the term "transversely"?

(Deposition of George D. Parker)

A. Yes; they must necessarily be moved to and from the belt, regulating the outlet of the fruit.

Q. 246. What is the necessity of regulating that outlet?

A. As the seasons change and the shape of the fruit changes. Suppose you are running navels and change to seedlings. It would be necessary to change the size of the opening slightly to allow the proper number of oranges to be packed in the standard box, the shape of the fruit having a great deal to do with the size of the opening.

Q. 247. You read over carefully the specification which was filed as a part of your application for letters patent No. 997,468, Complainant's Exhibit Parker Patent, before signing the same?

A. Yes. [419]

Q. 248. Are the statements contained in the specifications of that patent true and correct?

A. They are.

Q. 249. What did you mean in your direct examination in referring to your machine and, particularly, as exemplified in the model of your machine as here before us, in stating "The belt in the model performs no function in grading the fruit"?

(The witness requests that the answer quoted by complainant's counsel, together with the question to which it was a reply be read to him.)

Whereupon the further taking of these depositions was adjourned until 1:30 o'clock P. M., at the same place. [420]

(Deposition of George D. Parker.)

On May 1, 1912, at 1:30 o'clock P. M., the further taking of these depositions was resumed, pursuant to the adjournment.

Whereupon GEORGE D. PARKER was recalled and cross-examination resumed, as follows:

(Question No. 148 and the answer thereto are read to the witness in compliance with his request made at the noon adjournment; also the last question, to wit, question No. 249, put to him in cross-examination by complainant's counsel.)

Q. 250. (By Mr. LYON.) Answer the question.

A. No; it is only in the model to represent where the chain would be in the real machine.

Q. 251. Doesn't this belt or, in the real machine, the chain, carry the flat canvas belt longitudinally of the machine? A. No; it does not carry it.

Q. 252. In your last answer, what do you understand by the term "carry"?

A. Hold it up, I suppose.

Q. 253. Does this belt or chain propel or move along the flat canvas grading belt?

A. Yes; it propels.

Q. 254. And it holds the flat canvas belt from slipping out of position down the inclined support on which the canvas belt rests?

A. No; I don't think so.

Q. 255. What, then, is the object of attaching the belt to the chain?

A. The belt might be pretty slack, and the sprocket chain [421] would pull it along.

Q. 256. The chain and flat inclined grading belt

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moves longitudinally of the machine as one piece, does it not? A. All travel together; yes.

Q. 257. Is it possible to pull the flat belt down on the side of the machine without disconnecting it from the chain? A. No.

Q. 258. And the purpose of the guide in which, in the machine in actual practice, the belt of this model works, forms a guide for the chain or belt?

A. No, sir.

Q. 259. It does not? A. No.

Q. 260. The chain or belt in your machine runs in a grooved groove at the apex of the two inclined planes on which the grading belts move?

A. Yes.

Q. 261. You stated that you have been connected with the orange-packing business in Southern California since what time? A. Early boyhood.

Q. 262. About what year would that be?

A. I was raised in Orange County or what is now Orange County. That is as far back as I can remember.

Q. 263. Orange County, California?

A. Yes, sir.

Q. 264. And during all of that time you have had intimate connection with the packing and shipping of oranges? A. Yes, sir.

Q. 265. And have been familiar with all the various [422] machines and types of machines in use?

A. Not all, but quite a few.

Q. 266. Practically all?

A. Yes; I dare say I have a kind of a running knowledge of what was used most commonly in the

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particular localities in which I was.

Q. 267. How long have you been engaged in the manufacturing of machinery for orange packing-houses? A. About fourteen years.

Q. 268. That would be since about '97 or '08?

A. Yes, sir.

Q. 269. Over what portion of the orange-packing country did you travel during '97, '98 and '99?

A. Well, practically through Redlands, Upland, Pomona, Orange.

Q. 270. What do you mean by practically through these places?

A. We have a running knowledge of conditions.

Q. 271. In the years named, you had a running knowledge, as you put it, of the packing conditions throughout Southern California, so far as it was then developed in orange grading?

A. Yes, sir; particularly in Orange County and Orange, in particular.

Q. 272. Redlands and Upland are in San Bernardino County, are they not? A. Yes, sir.

Q. 273. Did your familiarity also during those years extend to Riverside County?

A. Yes—what years, did you say?

Q. 274. '97, '8 and '9. [423]

A. Riverside in '99; yes. Redlands earlier.

Q. 275. Then from '98 and '99 down you were conversant to the present time with practically all of the different machinery used in Southern California in the orange packing industry, were you not?

A. Fairly familiar.

(Deposition of George D. Parker)

Q. 276. You have invented a number of different devices for use in orange packing-houses, have you not? A. Yes, sir.

Q. 277. And taken out patents for a number of them? A. Yes, sir.

Q. 278. How early did you take out patents for any orange-packing machinery or machinery for use in orange packing-houses? A. 1904.

Q. 279. When did you first make your first application for such patent devices?

Mr. ACKER.—Objected to as irrelevant, immaterial, incompetent, and not pertinent to any issues in the present controversy. Furthermore, if there are any patents issued for such devices, the patents themselves will show when the application was made.

Q. 280. (By Mr. LYON.) I mean in a general way. I do not ask for the day of the month, but the year. A. Prior to 1900.

Q. 281. You made several applications for patents for orange packing-house machinery in 1900 and prior thereto?

A. Not prior, only in one case that I spoke of.

Q. 282. In 1900, did you not make several applications? [424] A. In 1900? I think not.

Q. 283. In 1901? A. I think not.

Q. 284. You were working at that time building packing-house machinery? A. Yes, sir.

Q. 285. In 1900? A. Yes, sir.

Q. 286. 1899? A. Yes, sir.

Q. 287. 1898? A. Yes, sir.

Q. 288. 1897?

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A. We had it in mind at that time.

Q. 289. During those years you were fairly familiar with the California grader? A. Yes, sir.

Mr. ACKER.—You mean the California grader as represented by the model exhibit in this case?

A. Yes; the one of which the little model here is a model.

Q. 290. (By Mr. LYON.) You are also familiar with the older style of California grader in which the roller side of the grader was made in one continuous piece? A. Yes, sir.

Q. 291. Had you used these California graders prior to 1899? A. Yes, sir.

Q. 292. In the practical grading of oranges?

A. Yes, sir.

Q. 293. Who manufactured the orange-grading machines which [425] have been installed and are now in use in the packing-house of the Riverside Heights Orange Growers' Association at Riverside, California? A. I manufactured six of them.

Q. 294. When did you manufacture and install in that packing-house the first of those machines?

A. I think about three years ago.

Q. 295. What time of the year?

A. Some time in the spring, if we remember rightly.

Q. 296. Prior to manufacturing the first of those machines you had for a long time previous been familiar with the Robert Strain grader or Stebler grader, as we have referred to it here in these proceedings, had you not? A. Perfectly, yes.

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Q. 297. You knew that the patent in suit had been issued for that grader long prior to the manufacture of the first of these machines for the defendant company?

Mr. ACKER.—Which grader? “That grader” would imply the grader installed by the defendant Riverside Heights Orange Growers’ Association.

Q. 298. (By Mr. LYON.) The question I believe to be clear, but the witness is asked if he didn’t know that the patent in suit had been issued long prior to the time that he first built one of these graders for the defendant Orange Growers’ Association.

A. Yes, I guess there is no question but what I knew there was a patent on it. I had no knowledge of it other than hearsay.

Q. 299. You had seen the word “Patent” and the day and date [426] of the patent in suit marked on the graders manufactured by Mr. Stebler prior to the time you made the first of the machines for the defendant Orange Growers’ Association, had you not?

A. Possibly; I guess there is no doubt about that.

Q. 300. When did you supply the other five Parker graders to the Riverside Orange Growers’ Association? A. Last year.

Q. 301. After this suit had been commenced?

A. Yes, sir.

Q. 302. Are all six of those graders still being used by the Riverside Heights Orange Growers’ Association? A. Yes, sir.

Q. 303. The Riverside Heights Orange Growers’

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Association in its packing-house to which we have just been referring also has two of the Stebler graders, has it not?

A. Only one, I think. They had four to my knowledge, which I removed.

Q. 304. Who is interested with you in the manufacture of the Parker graders? A. No one.

Q. 305. You are doing business individually under the name of the Parker Machine Works?

A. Yes, sir.

Q. 306. You are the same George D. Parker who was involved in litigation with Mr. Stebler, the complainant herein, and his then partner Austin A. Gamble in a suit in equity for the infringement of the O'Brien patent on clamping trucks?

A. Yes, sir.

Q. 307. How long have you been familiar with the patent [427] issued on the California grader?

A. I don't know that I ever paid any particular attention to that. I don't believe there ever was a patent issued on what was properly styled the California grader as manufactured and used between 1890 and 1900, in which there was a rope running in a grooved guide on one side and the roller or plurality of rollers end to end on the other.

Q. 308. How long have you been familiar with the James T. Ish patent issued in 1891?

A. I don't believe we ever paid much attention to that till this suit was brought.

Q. 309. Your understanding was that the California grader was not subject to any patent? Is that it?

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A. Yes. At least, at the time this suit was brought. It was old.

Q. 310. Subsequent to 1907 and the spring of 1908, is it not a fact that there has been no patent to cover the California grader?

A. It is our opinion that there never was one taken out for the California grader as constructed, although we understood that it was controlled by a former patent for an entirely different structure.

Q. 311. Then you were aware that the patent that you referred to in your last answer expired in 1908 and have been for a number of years? Is that correct? A. Yes, sir.

Q. 312. That is common knowledge in the orange packing industry here in Southern California and general talk among the packers? [428]

A. Yes.

Q. 313. But since 1908, who has manufactured or sold any of the California graders in Southern California? A. I have.

Q. 314. Where did you install them?

A. It was not installed.

Q. 315. What did you do with it?

A. Manufactured it at the shop and it is now in use by the Government.

Q. 316. Did you ever sell any of them to any of the orange packers? A. No.

Q. 317. Why not?

A. I have only been in the business of furnishing sizers about two years. Their call now is for one longer—having more bin room than the ordinary

(Deposition of George D. Parker.)

California sizer.

Q. 318. Then it is not possible to lengthen out the California grader to any desired length?

A. I see no reason why it should not be made as long as anyone should wish it. I don't think in my case it has anything to do with it.

Q. 319. You don't know of anyone else who ever manufactured since the expiration of the patent which you have referred to or since 1908, any of the California graders and put them into use?

A. I don't know of any being installed.

Q. 320. You have been in every packing-house in Southern California in the last few years, have you not?

A. I won't say every one, but I have been in a great many, more particularly the larger ones.
[429]

Q. 321. And you have also been in the orange packing-houses in the San Joaquin Valley?

A. Some of them.

Q. 322. What proportion?

A. Well, in the ones we might call association houses.

Q. 323. What percentage of the orange packing-houses in the San Joaquin Valley would that be?

A. Oh, I daresay half of them or more.

Q. 324. What is the purpose of making the rollers in your machine adjustable toward and away from the grading belt?

A. The aperture through which the fruit must pass must have some adjustment. This holds true

(Deposition of George D. Parker.)

in all sizers from 1885 down to the present time.

Q. 325. If you remove one of the rollers in one of your machines and continue to operate the machine feeding fruit onto the belt, what would become of the fruit when it reached the point where such roller has been removed?

A. If you take the sizing member or roll, as you may term it out, all the fruit necessarily would go through that opening.

Q. 326. The same is true of the so-called Stebler or Strain grader, is it not? A. Yes, sir.

Q. 327. And it is also true in your machine that if fruit is too large to pass under the first three rollers, the fruit rolls by till it gets to an opening under a roller large enough to permit it to roll out?

A. Yes, sir.

Q. 328. Do you find any statement in the specification in [430] the patent in suit that rolls must be mounted above the plane of the traveling belt or in the same plane or underneath the same plane?

A. Yes, sir.

Q. 329. Whereabouts?

A. Transversely, lying parallel with the plane; transversely of the line parallel with the plane which passes vertically and longitudinally through the center of said rollers. In this it evidently means transversely or cross-wise, and not vertically or in any other direction.

Q. 330. You refer to the language of claim 1 in your last answer? A. Yes, sir.

Q. 331. In your grader, the sizing or grading rolls

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are mounted longitudinally with the travelling belt, are they not? A. Yes, sir.

Q. 332. And they are also transverse of the belt, are they not?

A. We think they are vertical, as stated before.

Q. 333. Are they not transverse?

A. We consider them vertical and not transverse. The adjustment is vertical, as well.

Q. 334. What do you understand to be the meaning of the term "transverse"? Please define the meaning of the word "transverse" as you use it in your last answer.

A. As we use it and say it and as it apparently is used in defining the Strain patent, it means cross-wise of the sizer or in a horizontal plane.

Q. 335. Would not the rolls in your machine be ranged in a [431] horizontal plane?

A. What is the former question?

Mr. LYON.—I ask that the reporter note on the record that before answering these questions the witness is asking that his former question and answer be read to him.

Mr. ACKER.—Make a note on the record that the purport of the request is not apparent, and if there is any other theory or motive in the request I would like it explained. The witness has a right to ask that any question be read to him.

A. The word "transverse" in the Strain patent is used for the adjustment, apparently, of the rolls. The rolls in my sizer, of course, are running in a horizontal plane, and they would be sloping down-

(Deposition of George D. Parker.)

hill if we sloped the machine from one end. But I can't see that that has any particular significance in any way.

Q. 336. (By Mr. LYON.) The rolls are sloped downhill in the Strain machine if you slope the machine downhill, are they not? A. Yes, sir.

Q. 337. Will you point out any difference in respect to the transverse location of the Strain rollers with relation to the traveling belt of the Strain grader and the same relation of the grading rollers to the moving belt in your grader?

A. In the Strain sizer the roll is directly opposite, horizontally, the center of the rope. And the center of the roller being in a horizontal plane. While in the sizer of which this is a model—my machine, I mean—the rolls are above or vertically over.

Q. 338. What difference in the sizing of the fruit does this make? [432]

A. We don't know that it makes any difference in the sizing of the fruit.

Q. 339. In both the machines referred to by you, the fruit rolls off of the traveling belt and under the grading roller by gravity, does it not?

A. No, sir.

Q. 340. Explain your last answer.

A. In the Stebler sizer the rope is horizontal by the side of the roller and the entire weight of the fruit is carried between the rope and the roller, and if it were not for the fact that the roller is continually revolving, the fruit would be injured very greatly. In the Parker sizer the fruit is carried

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upon a belt and very little of the weight tending to force through the opening. Our, or the Parker sizer, is composed of a number of grading units, each unit being entirely independent of the others. They are also mounted to slide lengthwise to conform to the run of fruit, to correspond with the size of the bin, the sizing member or unit being small and short in itself, allowing considerable longitudinal movement. This would not be possible if it were not for the overlapping arms or fingers which successively form a guide-way to convey the fruit from one sizing unit to the other. In this machine we have a unique and very flexible means of taking care of the various or varying sizes of the fruit. By this we mean some fruits run to small sizes; others to medium. This calls for variation in the size of the bins. This adjustable feature is impossible, or the ability to deposit the fruit at any other than one position in there, in either the old California sizer or the Strain sizer. They are absolutely fixed [433] in this respect.

Q. 341. Well, I am still waiting, Mr. Parker, for you to explain why in both the Strain or Stebler sizer and in your sizer, gravity is not the force which causes the orange to roll off of the belt under the roller. Having given us a dissertation on something else, will you now answer the question?

Mr. ACKER.—I object to counsel's last statement. It is evident by the witness' answer that he has endeavored to give what counsel asks.

Mr. LYON.—We submit that the witness has en-

(Deposition of George D. Parker.)

deavored to do everything else but give us the reason why gravity is not the principle of operation of both these two sizers referred to.

Mr. ACKER.—Counsel submits that the last remark by counsel for complainant is merely brought about by his understanding of what he thinks the witness has given. If he would explain to the witness what is in his mind, perhaps the witness could answer more fully.

A. Gravity plays a part in these operations undoubtedly.

Q. 342. (By Mr. LYON.) What else plays a part in the operation referred to? What other means are employed?

A. Read the former question. (The reporter reads question No. 341.) In the Strain roller it does not roll under, but it drops through.

Q. 343. Is that the objection you made to my question that the weight of the orange was the cause of the orange being sized or delivered from the belt and roller both on the Strain and your sizer?

A. I am making no objection to your questions of any kind. I should be more than pleased to answer fully if I get the import [434] of what you want. I also realize that this is for the Court and we wish it to be just as clear as possible.

Q. 344. What causes the orange to depart from the run-way in your machine?

A. The natural inclination. Gravity plays a part in allowing the fruit to roll through under the roller. But they are not the same in both machines. But

(Deposition of George D. Parker.)

gravity does tend to force the fruit through.

Q. 345. Where does the orange rest while passing along the run-way in your machine?

A. On the belt—the wide belt.

Q. 346. Is that all it touches?

A. On one side; and on the sizing aperture on the other. After passing the aperture it is supported by the extensible guides from one sizing portion to the other. Does that answer your question?

Q. 347. If by the term “aperture” in your last answer you mean the roller, yes. But I cannot conceive how an orange can rest on an aperture. An aperture is a hole.

A. Well, the roller in the sizing member.

Q. 348. And on the Strain machine the orange rests on the belt and on the roller of the run-way, does it not? A. Yes, sir.

Q. 349. And when the opening between the roller and the run-way is sufficiently large, the weight of the orange causes it to drop through in the Strain grader?

A. Yes, sir; but they drop through not in the same method, although it is gravity that accomplishes the work.

Q. 350. And in your machine the orange rests on the belt [435] and on your roller, dropping through when the aperture between the roller and the belt is sufficiently large to permit it? Isn't that correct? A. Yes, sir.

Q. 351. And if the aperture or opening between the belt and roller in your machine is not large

(Deposition of George D. Parker.)

enough to permit the orange to drop through, the orange rolls along with the belt and on the roller until it reaches the proper sized aperture, is that not true? A. No, sir.

Q. 352. Where is it not true?

A. Our sizing units or members are each separate and individual. The sizing unit as shown here is a separate unit by itself, and the overlapping guides or arms allowing a longitudinal adjustment to conform with the different sizes or runs of fruit. These overlapping arms being very important, and are not rollers in any sense of the word.

Q. 353. What function in grading do these overlapping arms or fingers perform?

A. They are extensible guides and allow the rollers or the sizing member or unit to be slid along lengthwise to any desired amount, and they are merely to guide the fruit from one sizing member to the other.

Q. 354. Then, after you have adjusted the overlapping arms or fingers and the rollers in their longitudinal position with respect to the traveling belt, and you commence to grade oranges on your machine, is it not true that the overlapping arms or fingers simply fill a nongrading space?

A. That is not the purpose, no. [436]

Q. 355. But is it not true?

A. It is not true.

Q. 356. Why not?

A. Because that is not their function.

Q. 357. What else do they do in grading?

(Deposition of George D. Parker.)

A. It is to allow the extensible adjustment longitudinally of the sizer, allowing the separate units to conform with the bins, and has nothing whatever to do with the sizing.

Q. 358. No fruit or oranges pass out of the grade-way between the traveling belt and these overlapping arms, do they? A. No, sir.

Q. 359. Then my statement is correct, is it not, that these spaces are not grading spaces?

A. These are not grading spaces.

Q. 360. Why do you use rollers in your machine?

A. Just to act as a buffer or cushion, as it were. They are not rotating and it is not necessary to rotate them.

Q. 361. Did you ever try using simply a fixed bar or rod in their place? A. It is my opinion—

Q. 362. Answer the question. A. No, sir.

Q. 363. Did you ever know of a grader with a flat belt or an inclined belt and the other side of the runway formed of a graduated opening with a rod or fixed side, the belt traveling, to be tried?

A. Not of my own knowledge.

Q. 364. You have heard of such a thing, have you not? A. I heard Mr. Stebler say so. [437]

Q. 365. Don't you know that James W. Stephenson of Riverside, California, tried such an arrangement? A. So I heard Mr. Stebler state.

Q. 366. Don't you know it from any other person?

A. No, sir.

Q. 367. Never talked to Mr. Stephenson about it?

A. Yes, sir.

(Deposition of George D. Parker.)

Q. 368. When?

A. I don't know; before he built it, I guess.

Q. 369. Before he built his first machine?

A. Yes, sir.

Q. 370. And that was before you built the first of your machines? A. No, sir.

Q. 371. When you first talked to Mr. Stephenson?

A. Yes, sir.

Q. 372. And are we to understand you to be testifying that the first talk you had with Mr. Stephenson about the grader in which the roller side was omitted and replaced by a fixed graduated way, was not prior to your building your first machine? A. No, sir.

Q. 373. Have you seen the Stephenson grader?

A. Yes, sir.

Q. 374. When did you first see it?

A. In Worthley & Strong's house.

Q. 375. What was the construction of the run-way in that device?

A. An inclined belt and the roller or shaft roller.
[438]

Q. 376. Didn't you see the Stephenson machine while Mr. Stephenson was experimenting with it in the shop at Riverside?

A. I have seen his model; yes.

Q. 377. When did you first see that model?

Mr. ACKER.—Counsel for the defendant will state it on the record that at the present time there is nothing in evidence regarding this so-called Stephenson machine, and this line of examination is objected to as not proper cross-examination; and I

(Deposition of George D. Parker.)

ask counsel, if he can, to introduce a model or sketch of the Stephenson device, that the Court may be fully advised and informed of what the import of the question is.

A. We cannot recall the date.

Q. 378. (By Mr. LYON.) That was prior, however, to your building your first machine, wasn't it?

A. No, sir.

Q. 379. Is that the first machine put into the Riverside Heights Orange Growers' Association?

A. Yes; that is all right.

Q. 380. What machine have you ever installed of that type and style before that?

A. Did you say "installed"?

Q. 381. Read the question to the witness. (The question is read to the witness.)

Mr. ACKER.—Note on the record that the witness asks counsel if he means "Installed" or not and counsel refers to the reporter's notes.

Q. 382. (By Mr. LYON.) Where did you build a machine of that type and style before that?

A. I built several. [439]

Q. 383. When did you build the first one?

A. In 1907, I guess.

Q. 384. Where?

A. Los Angeles. I had it built in Los Angeles.

Q. 385. Did that have a traveling belt?

A. Yes, sir.

Q. 386. And a roller? A. Yes, sir.

Q. 387. What other things did you use as a buffer, as you say, in place of the rollers?

(Deposition of George D. Parker.)

A. We have never used anything else but a roller.

Q. 388. Why not?

A. Oh, we thought the roller answered our purpose as well as anything else we could get, and saw no reason why we should not use it.

Q. 389. In your opinion, would it be practical to use a straight edge which was nonyielding, in place of the roller? A. No.

Q. 390. Is the longitudinal adjustment of rollers all the distributing means which you employed for your grader in order to carry the fruit to the bins?

A. No.

Q. 391. What else did you employ?

A. Just a simple little belt running alongside of the bin.

Q. 392. Just where is that belt located?

A. On the upper edge of the bin, we would say.

Q. 393. Just beyond the opening under the roller, is it not?

A. It is down below the sizing portion.

Q. 394. Well, it is between the grade-ways and bins? [440] A. Yes, sir.

Q. 395. What is the purpose of that belt?

A. Just a kind of a spreader or distributor, as it were.

Q. 396. To distribute what?

A. Distribute the fruit.

Q. 397. Distribute the fruit where?

A. In the bin. We might add that this was not uncommon in other arts, and I see no bearing on the matter in hand.

(Deposition of George D. Parker.)

Q. 398. You use that distributing belt to carry the fruit as it issues from between the traveling belt and roller of the run-way to the desired bin or portion of the bin, do you not?

Mr. ACKER.—Objected to as immaterial, irrelevant, incompetent. On the further ground that it is not embraced in any issues in the present controversy, and does not fall within any of the terms of the claims of the patent sued upon, nor is any such device shown or described in the patent in suit, and the only purpose of such examination as is seen at the present time is to prolong the record, or else it is a fishing expedition.

A. No, sir.

Q. 399. (By Mr. LYON.) What do you use it for?

Mr. ACKER.—The same objection.

A. It is no use whatever until the bin is full.

Q. 400. (By Mr. LYON.) And then what do you use it for?

Mr. ACKER.—The same objection.

A. To distribute the fruit a little bit lengthwise of the bin.

Q. 401. (By Mr. LYON.) It would carry the fruit along from bin to bin if you wish?

Mr. ACKER.—The same objection. [441]

A. Why should we wish to carry it from bin to bin?

Q. 402. (By Mr. LYON.) Answer the question and don't speculate as to something else. Please answer the mechanical question—the question as to the mechanics. A. No, sir.

(Deposition of George D. Parker.)

Q. 403. It would not? A. No, sir.

Q. 404. You testified on direct examination that if you removed the belt from the rollers of the Stebler machine the fruit would clog the roller. What machine did you see act in this manner?

A. We have seen this happen a great many times, but we especially went into that quite thoroughly at the Upland and Pomona houses where some of these Strain sizers are in use, and have been told by those operating the same that the belts were absolutely necessary and essential for the operation of the same.

Mr. LYON.—We move to strike out the answer and exclude it from consideration—all that portion of the preceding answer which commenced with and follows the words “and were told,” on the ground that the same is hearsay and not the best evidence, and being a statement not made under oath.

Q. 405. (By Mr. LYON.) Did you make any effort to adjust the rollers in that Strain grader so as to size the fruit and yet not require the use of the belt in driving the rollers, or did you take the machine just as it stood?

A. The machine or machines which we have reference to were in actual use, and to demonstrate to our entire satisfaction, all we did was to throw off the belt. This allowed the roller to stop rotating and immediately the fruit clogged up the run-ways [442] and jumped over.

Q. 406. You made no adjustment or any other effort, but simply to throw off the belt?

A. We had no occasion to touch it only to throw

(Deposition of George D. Parker.)

off the belt, because it was in continuous use.

Q. 407. Did you disconnect the belts and remove them from the machines?

A. No, sir; only threw the belt off of the little pulley and only for a moment, as the sizer was in use and it would have inconvenienced the house to have allowed it to be without the belt for any length of time.

Q. 408. What belt off of what pulley?

A. Each end-to-end roller in the Strain sizer is driven by a belt, these rollers all being driven from a common shaft, running lengthwise of the machine, and over the bins. There is a separate pulley for each roller, and a separate belt for each roller. We threw off the belt off of this little pulley running from the common shaft, and that, of course, stopped the roller to which this belt ran.

Q. 409. Where did the portion of the belt that was thrown off of the pulley on the common shaft rest?

A. On the rotating shaft. But apparently it did not rest heavy enough on the shaft to run the roll. We might add here that if the idler or weight keeping the belt tight had drawn the belt tight enough to the shaft, there would still have been some rotation to the roller.

Q. 410. You have referred to an overhead system or elevated sizer. By whom were those put in use or installed?

A. We believe the H. K. Miller Manufacturing Company. [443]

Q. 411. What kind of graders were those graders?

(Deposition of George D. Parker.)

A. Similar to the Strain sizer and possibly a little shorter.

Q. 412. They were not the California grader, using stepped rollers, were they?

A. No; we think not.

Q. 413. When you say "we think not," who is it that thinks not? A. I.

Q. 414. Don't you know or are you guessing at this whole matter, or testifying from information rather than your own knowledge?

Mr. ACKER.—I object to the statement made by counsel and the inference to be drawn therefrom.

A. We have seen these sizers in use. There is one, we think, in use not long ago, but whether they are stepped rollers or not we cannot say.

Q. 415. (By Mr. LYON.) Then when you refer to the elevated California sizers in which the fruit was allowed to run down or roll down an inclined run-way or chute, you do not mean the California sizer with stepped rollers as you now state you have no personal knowledge of such use? Is that true?

A. Hardly.

Q. 416. Explain.

A. The California sizer was set up, and there were chutes running fore and aft in these as well as the Rayburn, but the Rayburn was situated, as it were, on an upper floor, allowing room underneath for the packers to work. While in the California sizer it was only elevated to maybe one-half of this extent. This method was quite common prior to 1900, and is [444] evidenced by one of the photographs we have

(Deposition of George D. Parker.)

here, which shows this elevated to a slight extent.

Q. 417. Please produce that photograph. (Witness produces photograph.)

Mr. ACKER.—Referring to photograph marked “Defendants’ Exhibit in its Cross-examination.”

Q. 418. (By Mr. LYON.) The object of this elevation was to increase the bin capacity?

A. Yes, sir.

Q. 419. And permit more packers at the bins?

A. Yes, sir.

Q. 420. The photograph, as you see, only shows a slight step in the direction of elevation. Is that correct? A. Yes.

Q. 421. And this had in 1900 been carried out with the California grader to even a greater degree, elevating the grader higher, and making the inclined spots longer, so as to increase the bin space even to a greater extent around the grader? Is that true?

A. Yes, sir; that is correct.

Q. 422. What packing-houses and where are they located, have you equipped with machines like the Parker machines referred to by you, and how many?

A. We cannot say offhand.

Q. 423. How many fruit graders are in use in California? A. That I cannot say.

Q. 424. Have you ever figured up the number of fruit graders in use in California for sizing oranges?

A. I never had any occasion to. I don’t know that there [445] would be any way of figuring that up.

Q. 425. How many machines all told of your construction—I mean the machine which you refer to

(Deposition of George D. Parker.)

here as the Parker machine—have you manufactured? A. I cannot recall the exact number.

Q. 426. Approximately?

A. Somewhere between sixty and eighty.

Q. 427. Well, has it been seventy?

A. I can't say.

Q. 428. Has it been sixty? A. Yes, sir.

Q. 429. You are positive that you have made and sold as many as sixty?

A. Oh, yes; there is no doubt about that.

Q. 430. They have all been substantially of this same construction in the relation of the parts as exhibited by the model, with the exception of the few slight changes which you have heretofore pointed out to us? A. Yes, sir.

Q. 431. And those have all been manufactured and sold by you since the installation of this first machine for the Riverside Heights Orange Growers' Association? A. Yes, sir.

Q. 432. You are continuing the manufacture and offer for sale of these machines?

A. Yes, sir; we have quite a call for them.

Q. 433. And intend to continue unless prohibited by the Court?

A. Yes, sir. We see no occasion to stop. [446]

Q. 434. Are you able to state approximately how many of those machines you have sold in Southern California?

A. Oh, they have practically all been sold around home where they are well known. In fact, we had so much to do the past winter that we couldn't even

(Deposition of George D. Parker.)

go up north to do some installing that was asked for. We had to turn away quite a lot of work.

Q. 435. Your attention has been drawn to the Bailey patent 671,676. Can you tell us where in any packing-house one of these machines can be seen?

A. No, sir.

Q. 436. Did you ever see one of them in actual use in any packing-house? A. No, sir.

Redirect Examination.

(By Mr. ACKER.)

Q. 437. Mr. Parker, in your cross-examination you stated that four Stebler sizers had been taken out of the packing-house of the Riverside Heights Orange Growers' Association, did you not?

A. Yes, sir.

Q. 438. What were those sizers replaced with, if anything, at all?

A. These were Stebler or Strain sizers and were replaced by my own.

Q. 439. To what was due the replacement of the Stebler sizer by the Parker sizer?

A. The better equipment. [447]

Q. 440. What do you mean by the term "better equipment"?

A. Well, up-to-date. The art has been improving steadily since 1890, and we expect it will be so in the future. Our sizers will, more than likely, be replaced by something better later on.

Q. 441. You were asked in cross-examination whether gravity entered into the proposition relative to the escape of the fruit through the sizing aperture,

(Deposition of George D. Parker.)

relative to the Strain sizer and as to the Parker sizer. I will ask you to examine the model of California sizer which has been introduced in evidence, and ask you whether gravity enters into that sizer regarding the escape of the fruit? A. Yes, sir.

Q. 442. How is the fruit carried through the California sizer and sized therein, referring now to the exhibit model California sizer?

A. In this sizer the fruit is fed from the upper end of the rolls and carried by the rope in the grooved guide, successively, through the several sizing portions throughout the length of the grader.

Q. 443. Does the fruit in the California sizer pass from one roll directly onto an adjacent roll?

A. Yes, sir. As it leaves the first roll and enters the second roll, there is no nonavailable grading space.

Q. 444. How does the travel of the fruit from one roll onto an adjacent roll compare with the travel of the fruit from one roll to an adjacent roll of the Stebler sizer? The fore part of my question refers to the California sizer.

A. These two sizers are identical in every particular, [448] being practically continuous end-to-end rolls.

Q. 445. How does the grooved guide in the California sizer compare with the grooved guide of the Stebler sizer?

A. They are identical in every particular.

Q. 446. How does the propelling rope of the California sizer compare with the propelling rope of the Strain sizer? A. They are identical.

(Deposition of George D. Parker.)

Q. 447. How is the propelling rope of the California sizer supported in comparison with the propelling rope of the Strain or Stebler sizer?

A. They are both supported in a circular or grooved guide, lying opposite to and in a horizontal position to the roller.

Q. 448. Am I correct in understanding from your testimony that gravity enters into all sizers having controlled apertures for the escape of fruit?

A. Yes, sir; to a more or less extent.

Q. 449. Does it enter into the California sizer as represented by the model exhibit to the same extent that it enters into the Stebler or Strain sizer?

A. Yes, sir; the rope and roller in the California are in the same relative positions as they are in the Strain or Stebler sizer, and are identical in that respect.

Q. 450. Several times in the course of your cross-examination you were asked relative to brackets supporting sizing rolls in your machine, and I will ask you whether by the term "bracket" as employed therein you had reference to the bracket conforming in any manner whatsoever to the bracket for supporting the end-to-end rollers in the patent in suit.

Mr. LYON.—Objected to as leading. [449]

Q. 451. (By Mr. ACKER.) And I will ask you to explain what you had reference to in using the term "Bracket" or in replying to cross-questions employing the word "brackets" in connection with the Parker machine.

A. We do not think that in the Parker machine

(Deposition of George D. Parker.)

we have a bracket. If we were to describe this properly we would call it a U-shaped grading member, having a revolvable mounted cushion in the same.

Q. 452. Could the Parker device be utilized as a successful grader if the overlapping fingers extended from the grading units were eliminated?

A. No, sir. The overlapping fingers are the most important part of the whole. Without these we would get no longitudinal adjustment, and this is of more importance at the present time than any other feature.

Q. 453. Would it be possible in your opinion to separate or space a distance apart with end-to-end rollers of the Stebler grader and get the bearings of the rolls connected by overlapping fingers as in your device, and have a successful operating machine with the component member of the grader constructed as disclosed in the patent in suit and in the Stebler device?

Mr. LYON.—Objected to as leading and incompetent; no foundation is laid, the witness not having qualified to answer the question.

A. No, sir.

Q. 454. (By Mr. ACKER.) Please give the reason for your opinion.

Mr. LYON.—The same objection. [450]

A. Immediately the fruit left the revolvable or revolving power-driven roll, and came onto the stationery or nonrotating surface, the fruit would necessarily clog as it now does when the roller is stopped.

(Deposition of George D. Parker.)

Q. 455. (By Mr. ACKER.) On cross-examination your attention was directed to the matter contained in the Strain patent between lines 42 and 55 of the specifications, and I will ask you to examine the subject-matter contained between those lines and to state whether or not in your opinion there appears in the Parker device the elements called for and mentioned in said portion of the specifications, and arranged as therein called for.

Mr. LYON.—Objected to as leading.

A. No, sir.

Q. 456. (By Mr. ACKER.) You find no such combination?

Mr. LYON.—The same objection.

A. No such combination.

Q. 457. (By Mr. ACKER.) Do you find any equivalent devices in the Parker grader?

Mr. LYON.—Objected to as indefinite, not being shown what is intended by the term “equivalent,” and also as leading.

A. No, sir.

Q. 458. I notice in the specifications of the Strain patent in suit between lines 55 and 60 a reference to band tighteners. I will ask you to state whether such devices appear in the Parker model and whether they are made use of or employed in the Parker device as installed and operated.

Mr. LYON.—Objected to as leading.

A. We have no need of these and they are not used, the construction of the machine being so far apart.

(Deposition of George D. Parker.)

Q. 459. (By Mr. ACKER.) How does the run-way of the California sizer, the model of which is in evidence, compare with the run-way of the patent in suit and as imparted in the Stebler sizer as installed?

A. It is identical. The run-way composed on one side of a rope running in a groove, and on the other a series of rolls, the apertures between the rolls and the rope being successively wider, allowing the different sizes of fruit to fall through them.

Recross-examination.

(By Mr. LYON.)

Q. 460. What do you understand by the term "equivalent"? A. Something similar.

Q. 461. In what way? A. Almost any way.

Q. 462. You mean something mechanically fashioned to resemble another thing? A. Yes, sir.

Q. 463. And it is in this sense that you answer the question of your counsel? A. Yes, sir. [452]

[Deposition of Edward S. Cobb, for Defendants.]

EDWARD S. COBB, a witness produced on behalf of the defendants, being first duly sworn according to law, testified as follows, to wit:

Direct Examination.

(By Mr. ACKER.)

Q. 1. State your name, age, residence and occupation.

A. My age is sixty-four years; occupation, consulting engineer; office, 427 Central Building; I reside in Whittier, California.

(Deposition of Edward S. Cobb.)

Q. 2. How long have you followed your profession as consulting engineer?

A. Educationally and practically since 1875.

Q. 3. State in general what preparation you had.

A. Prior to 1875 I was building boats, and was pattern-maker in the shop in the general way. From '75 to '79, student in the Worcester Polytechnic Institute; '79 to '80, I was assistant to the superintendent of motive power on the railroad; then chief draftsman for the Pond Machine & Tool Works. Then I opened an office in Boston and spent about two years designing machinery, largely, working on patent office drawings to some extent. The machinery I was designing was boot and shoe machinery, paper bag machinery and newspaper folding. From '82 to '88, I taught mechanical engineering and machine designing at the Rose Polytechnic, at Terre Haute, Indiana. From '88 to '92 I was doing general engineering with Dallas, Texas, as headquarters. From '92 to '93 I was designing engineer for an engine manufacturer in Erie, Pennsylvania. In '93 and '94 mechanical and hydraulic engineer for the Risdon Iron Works in [453] San Francisco. From '94 to '96 in business for myself as a consulting and mechanical and hydraulic engineer in San Francisco. '96 to 1900 in the same business in San Francisco in the firm of Cobb & Hesselmeyer. From 1900 to 1901, consulting engineer in Los Angeles, California.

Q. 4. Have you charge of any engineering work at the present time?

(Deposition of Edward S. Cobb.)

A. I do mostly consulting work. Altogether consulting work.

Q. 5. Are you familiar with machinery generally?

A. Yes, I am; generally speaking, considered a good mechanic.

Q. 6. Are you familiar with drawings and the reading of drawings? A. Yes, sir.

Q. 7. Are you familiar with letters patent or readings of letters patent?

A. I have read a great many and have had considerable experience in construction, and also been called into court a number of times in connection with them.

Q. 8. Have you ever experted matters in the Federal court? A. Yes, sir.

Q. 9. Are you familiar with the class of machinery involved in the present controversy?

A. I have seen such machinery in operation.

Q. 10. Do you understand the operation of it?

A. In a general way.

Q. 11. Have you read and do you understand re-issue letters patent No. 12,297 granted Robert Strain for an improved fruit [454] grader, the same being the letters patent in suit?

A. I have read it over and I believe I understand it.

Q. 12. Do you understand the construction of the machinery therein shown and described?

A. I think so.

Q. 13. Have you ever examined the machines con-

(Deposition of Edward S. Cobb.)

structed under and in accordance with said letters patent?

A. I have seen at least one machine that I believe was constructed under that patent.

Q. 14. Are you familiar with the construction and operation of defendants' machine or with the machine employed by the defendant in the present action?

A. I have seen a machine of that character in operation.

Q. 15. Do you understand the operation of it?

A. Pretty fairly well. I could operate it.

Q. 16. I direct your attention to a list of copies of United States letters patent offered in evidence in this case, and ask you to examine the same and state whether you have read and whether you understand the devices disclosed by those letters patent?

A. I have first in hand here Ellithorpe No. 399,509. I have not particularly studied that patent.

I have here Jones, 430,031. I have carefully studied the drawings shown in that patent and been casually over the specifications. I might say in connection with all these patents, I have only been over the specifications of all of them once, because they were at my disposal for so short a time. I have looked over the drawings of them all very carefully.

[455]

The next one I have is Jones, 442,288. I understand the drawing of that patent.

Hutchins, 456,092. I understanding the drawings of that patent.

(Deposition of Edward S. Cobb.)

Ish, 458,422. I can read the drawings of that patent.

Hutchins, 465,856. I can read the drawings of that patent.

Woodward, 466,817. I can read the drawings of that patent.

Burke, 482,294. I can read the drawings of that patent.

Fleming, 475,497. I can read the drawings of that patent.

Jones, 529,032. I can understand that drawing.

Cerruti, 534,783. I can read that drawing.

Huntley, 538,330. I can read that drawing.

Bailey, 671,626. I can read that drawing.

Maull, 673,127. I can read that drawing.

Nelson, 713,484. That one is like the first one. I have not been through it so completely as the others. I can read it, I suppose, if I give time, a little bit of study.

Q. 17. You state that you can read the drawings. What do you mean by that?

A. I mean in general I can describe the machine and its operation that is intended to be represented by the drawing.

Q. 18. Will you please take the patents to which your attention has been directed and explain in general the construction of the devices disclosed by the drawings.

Mr. LYON.—Objected to as incompetent, no foundation laid, the witness not having qualified to an-

(Deposition of Edward S. Cobb.)

swer the question.

Q. 19. (By Mr. ACKER.) Are you familiar with the reading of patent office drawings? [456]

A. Yes, sir; I can read them all right and understand what they say.

Q. 20. And understand the construction of the devices disclosed thereby? A. Yes, sir.

Q. 21. Now, will you please take the patent and describe the devices that it illustrates.

Mr. LYON.—The same objection as last noted on the record.

A. Bailey, 671,646. These drawings represent a machine for sorting fruit or sizing it, and the drawings disclose a machine embodying a movable ring or carrier which in the particular illustration shown has its top surface composed of two inclined planes, either one of these inclined surfaces acting as a carrier for the fruit to be sized. As the fruit is carried along on this inclined surface, it is maintained in its position by coming in contact with guides, one of which guides surrounds the outer circumference of the ring approximately; and the other of which surrounds the inner circumference of the ring approximately. These guides are made up of sections and have upon their lower edge near the point of contact with the fruit to be sized, shafting upon which loose washers or discs may revolve, and the sizing of the fruit is accomplished by varying the distances between these revolving washers or discs, and the inclined surface of the circular carrier. The distance between the revolving discs and the circular

(Deposition of Edward S. Cobb.)

carrier may be varied by raising and lowering the supports of the revolving members. The next is 538,530, Huntley. In this the drawing discloses a hand-driven machine for sizing fruit or other articles, and is composed of a drum or [457] cylinder which may be revolved by hand, lying or disposed above a trough into which the fruit to be sized is fed. This trough lies in the illustration below the cylinder, and the surface of the trough supporting the fruit is not parallel to the axis of the cylinder. Consequently, fruit entering the larger end of the same and running toward the smaller end, would be caught by the cylinder and if the cylinder were revolving in a direction suitable and approximately at right angles to the axis of the trough, the fruit would be discharged from the trough according to its size.

534,783, Cerruti. This drawing discloses a fruit sizing device which in its operating functions is shown in duplicate. That is to say, two sizing runs, one by the side of the other and practically parallel with it. Either one of these sizing devices consists of two traveling ropes lying in the same plane but not parallel with one another. They receive the fruit at one end, and these ropes as they carry the fruit along diverge toward the opposite end, thus forming openings of continuously increasing size between the two ropes, through which the material or fruit to be sized may drop into the proper receptacles.

539,032, Jones. The drawing in this patent discloses a revolving disc set eccentric to an outer ring

(Deposition of Edward S. Cobb.)

and lying in the same plane therewith, thus providing an annular space between the two which varies in size or width, increasing in width for one-half the diameter of the device, and into which space fruit may be discharged and the varying and gradually increasing size of the space allowing the smaller fruit to be discharged first and the larger fruit last into the proper run-ways to convey it from the separating device. [458]

475,497, Fleming. This drawing discloses a fruit separating device consisting of two or more carrying or propelling link members which may be chain or belt. To these carriers are attached transversely bars having spaces between the bars greater than the size of the largest material to be sorted. Attached to each bar and swinging freely therefrom as a shutter which when closed into the plane formed by the two carrying members completely closes the space between any one part and its adjacent part on the carrier. These flaps or doors are for the most part able to take any position that gravity may cause them to occupy, but through a portion of their circuit through the machine they are constrained first to take a position closing the apertures between the above-mentioned transverse bars. Next their separating ends come in contact with guides that allow these flaps to open to a greater or less extent, as may be desired, and in the drawing they are shown to open slightly at one stage of their progress, open still more at another stage of their progress, and still more at another, until they are finally entirely open.

(Deposition of Edward S. Cobb.)

At each of these separate stages a different size of material would be dropped therefrom into a suitable receptacle.

482,294, Burke. The drawing of this device discloses a series of parallel members cylindrical in form and made up of sections of different diameter, following one another in their consecutive order as regards size. That is to say, they are all large at the same end and decrease in diameters by steps to the smaller end. These elements are spaced at some distance apart and between these elements there are provided fingers or carriers which may operate between these members to [459] pass the fruit along between them, so that as it comes to any particular opening of sufficient size to pass into it, it may drop into the proper receptacle for it.

466,817, Woodward. This drawing discloses a fruit-sizing machine consisting practically of two ropes which are movable, lying in the same plane, but not parallel, diverging from one end to the other, and in the direction in which they travel. They are arranged in such a manner that fruit discharged onto these ropes at the point where they are near together, and carried toward the divergent end by the motion of the ropes in that direction, would at some time during its course meet with a sufficiently wide opening to allow the same to drop through into a proper receptacle to receive the same.

465,856, Hutchins. The drawings of this device disclose a pair of rollers having located between them and parallel to their axes a partition in the upper

(Deposition of Edward S. Cobb.)

edge of which are two parallel grooves, and in these parallel grooves a belt is caused to travel in each case. The fruit is sized by the distance maintained between the belt carrier and the roller. This drawing shows more than one set of these rollers disposed one above the other.

458,422, Ish. The drawings of this machine disclose a stepped roller provided with means of keeping it in revolution. And parallel with the axis of this roller there is disposed a traveling belt, the direction and motion of which is that corresponding to a direction from the larger end of the stepped roller to the smaller end of the stepped roller. Fruit disposed on the traveling belt and between it and the revolving roll at the end of the roll having the larger diameter, will be [460] caused to rotate and travel toward the end of the roll having the smaller diameter, and when the fruit arrives at any particular section having a large enough opening for it to drop through it will do so into a receptacle provided for it.

456,092, Hutchins. In this machine the drawings disclose a pair of inclined rollers lying in the same inclined plane, and the inclination of these rollers may be adjusted by suitable devices. The rollers are caused to revolve by means of belting. Between the rollers there is a partition having a broad upper surface and composed of two inclined surfaces, and covering this double incline upper surface there is a traveling belt for conveying the material to be sized, or articles to be sized.

(Deposition of Edward S. Cobb.)

442,288, Jones. The drawings of this machine disclose a pair of parallel cylindrical members capable of being revolved and disposed one on each side of a fixed member. The cross-sections shown in the drawings indicate that all of the members are of the same size. Fruit to be sized is distributed on that end of the machine where the diameters of these parallel members are the largest, and caused to travel toward that end of the machine where the diameters of the elements mentioned are smallest, and will in such travel arrive at openings of suitable size for the fruit to pass through into receptacles where it is carried away. The sizing is done between the surfaces of cylinders of different diameters.

430,031, Jones. The drawings of this machine show two parallel rolls having formed or built onto their exterior cylindrical surfaces a spiral after the manner of a coarse-threaded screw. These are disposed one on each side of the central member composed of a series of cylinders of different [461] diameters. The two rolls having the spirals and the central portion formed of the cylinders of different diameter all lie in the same plane, and have their axes parallel to one another, and the fruit is sized by passing between the parallel rolls that are of uniform diameter and the member formed of the cylinders of different diameters.

673,127, Maull—

Mr. LYON.—The further objection to the testimony of this witness so far as this patent is con-

(Deposition of Edward S. Cobb.)

cerned is noted on the same ground as noted to the offer of the exhibits in evidence.

A. The drawings of this machine disclose a revolving circular member lying in a horizontal plane and disposed adjustably eccentric to a surrounding member, so as to form between the two an annulus of varying width. The varying width between the members serving as a measuring device for sizing fruit or other articles.

Ellithorpe, 399,509. The essential features of this device as a sizing machine consist in a flexible table or support through the surfaces of which are holes of various sizes. The material to be sorted is caused to travel over this flexible surface and fall through the holes as it reaches them of proper size.

713,484, Nelson—

Mr. LYON.—The testimony of this witness in regard to this patent is objected to, upon the same grounds and for the same reasons as set forth in the objection to the offer of said exhibit in evidence.

A. I have not studied this device sufficiently to give an offhand intelligent description of it, and unless time is [462] given to me to look it over—

Q. 22. (By Mr. ACKER.) We will eliminate that.

Whereupon the further taking of testimony herein was adjourned until Thursday, May 2, 1912, at 10 o'clock A. M., at the same place. [463]

On Thursday, May 2, 1912, at 10 o'clock A. M., the further taking of testimony herein was resumed, pursuant to the adjournment.

(Deposition of Edward S. Cobb.)

Whereupon EDWARD S. COBB was recalled for further direct examination, and testified as follows: (By Mr. ACKER.)

Q. 23. You stated yesterday that you had casually examined the patents which you testified to. What do you mean by the expression "casually examined"?

A. It is my way of saying that I had read over all the specifications of the patents in question, but given particular attention to the constructive features shown in the drawing, and that by "casual" I mean that I had not studied them to such an extent that I could remember the details of each individual patent offhand. I gave special study to the drawings following these patents and I remember giving particular study to the Bailey patent which struck me as being identical in its principles of construction with the patent in suit.

Q. 24. Please explain more fully what your experience has been with devices of the character of that in the present controversy, as to the apparatus themselves.

A. I have seen a great number of grading or sizing machines in operation at a number of different packing-houses in Southern California, and made trips for the purpose of examining their operation and studying their operation. I have myself put fruit into these sizing machines, marked the fruit, and after it had been delivered to the bins replaced it [464] in the feeding hopper and noted whether the same fruit was again discharged into the same bins or not, doing this for the purpose of testing out the accuracy of the operation.

(Deposition of Edward S. Cobb.)

Q. 25. To what graders did that apply?

A. The particular grader that I performed that experiment on is located at Rivera.

Q. 26. What grader was it?

A. The Parker machine.

Q. 27. Did you ever personally examine the machine known as the Stebler machine constructed under the patent in suit?

A. I examined the machine known as the Stebler machine at two or three different packing-houses. One, I think, was—I am not prepared to say the names of the places, because I went on that trip with yourself and Mr. Parker and we stopped at a number of packing-houses. I think one was at Charter Oak and two at San Dimas where I saw the machines. The only time that I saw a machine that I understood to be a Stebler machine in operation was at an exposition in this city. I went and saw that machine operate on three different occasions, and I did it as a matter of interest and study and without any reference to any patent or patent suits, and not knowing at that time that any such suits were in prospect.

Q. 28. Are you thoroughly familiar with the operations of the sizer known as the Stebler sizer and constructed according to the letters patent in suit?

A. I have seen those machines in operation, and I believe that I thoroughly understand every feature of their manipulation to grade fruit.

Q. 29. What other machines, if any, did you examine during [465] the course of the trips that you speak of taking?

(Deposition of Edward S. Cobb.)

A. At one packing-house I had a fine opportunity to examine a California grader. The machine was not set up for use, but it was available for examination and I did examine its construction features so far as it pertained to the grading of fruit.

Q. 30. What do you mean by the expression "California grader"?

A. This grader that I examined was composed of a series of stepped rollers placed end to end, and these rolls were adjustable to and from a grooved guide in which a rope that could be made to travel was located.

Q. 31. Have you carefully examined the letters patent in evidence in the present suit, the same being reissue patent 12,297, and do you understand the device disclosed thereby? A. Yes, sir; I do.

Q. 32. Please describe the invention that you understand to be disclosed by the letters patent in suit, using your own language, without reference to the patent itself.

Mr. LYON.—Objected to as incompetent, not the best evidence. The patent speaks for itself. It is incompetent and calling for a conclusion and guess of the witness, and not a proper subject matter for expert testimony. The witness has not shown himself qualified to testify as to what the invention disclosed by the Strain patent was, nor do his answers show anything more than his conclusion as to what the invention intended to be covered by was. The witness should be asked to explain the machine and its mode of operation.

(Deposition of Edward S. Cobb.)

Q. 33. (By Mr. ACKER.) Describe in your own language the [466] device in the patent in suit.

A. I find shown in the patent in suit a machine for sizing fruit, consisting of two parallel members which, together, form a run-way, one of these members consisting of a fixed grooved guide having a groove and rope to which motion may be given, and the other member parallel therewith composed of a number of series of rolls placed end to end. These rolls are arranged to rotate. They are individually arranged to be adjustable to and from the opposing parallel member of the run-way. The ends of each roll are supported at or by the end of an overhanging arm, these arms themselves being supported by suitable bearings in which the arms may move, and the movement of these overhanging arms in these supports is accomplished by turning a nut upon the threaded extended portion of the arms, the object of this construction being to vary the distance between any roll and its opposite parallel member of the sizing device. These rolls all move in a plane which would contain the traveling rope.

Q. 34. In your last answer what do you mean by the expression "a series of end-to-end rolls" as used by you?

A. The patent discloses to me rolls placed end to end in this sense: That one roller is just as near the next roller to it in position as constructive features would allow it to be operated, when we have in mind the fact that each of the ends of these rolls mentioned is independently adjustable.

(Deposition of Edward S. Cobb.)

Q. 35. Independently adjustable how? In what manner?

A. The ends of one roll are adjustable independently of the end of its adjacent roll.

Q. 36. And adjustable in what direction? [467]

A. To and from the moving carrier. As shown by the drawing it would be probably horizontal, but it is to and from the moving carrier.

Q. 37. Please examine the description or specifications of the reissue letters patent 12,297, the same being the patent in suit, and state whether or not the said description makes any provision as to the diameter of the end-to-end rolls.

Q. 38. Would or would not a stepped roller conform to the expression "roller"?

Mr. LYON.—Objected to as indefinite and uncertain, as it would depend entirely upon the context, and the mode of operation of the mechanical elements with relation to which such expressions were used.

A. It would conform. I further believe that a longitudinal section of this roller could be of any form of outline so far as the descriptions given in the patent are concerned.

Q. 39. (By Mr. ACKER.) I will direct your attention to a model exhibit which has been introduced in this case, and ask you to examine the same and state, if you can, what it relates to or whether you can identify it in any manner whatsoever.

A. I find here a model which represents the machine that I examined, and the machine that was

(Deposition of Edward S. Cobb.)
known to me as the California grader.

Mr. ACKER.—I will state that the witness is now examining the model heretofore introduced in evidence as Defendants' Exhibit California Sizer.

Q. 40. Please explain fully the character of the sizer [468] disclosed by that model, and the construction of the same and the operation of its several parts.

A. This machine represented by this model shows a machine with two run-ways that are parallel. Each run-way consists of a fixed groove guide containing within the groove a rope, and having means for giving movement to the rope, this grooved guide and rope constituting one of the two parallel members of the fruit-sizing machine. The other parallel member of the fruit-sizing machine constituting the parallel member previously mentioned, is composed of a number of rolls placed end to end. Each end of the rolls is adjustable to and from the fixed member of the run-way. Means are provided for positively rotating the end-to-end rolls.

Q. 41. How are the end-to-end rollers of the model exhibit which you state conforms to the California sizer examined by you supported or mounted?

A. They are supported in brackets that give adjustability to and from the fixed member of the grader.

Q. 42. When you say the fixed member of the grader, do you mean the fixed member of the run-way?

A. Yes, sir; the fixed member of the run-way—the

(Deposition of Edward S. Cobb.)

member containing the fruit and traveling rope. In the machine that I saw and in this model the rollers are shown as stepped. That is to say, all portions of the same roller are not of the same diameter. That provides a number of grading sizes, independent of the adjustable rollers. That is to say, there are a number of sizes of fruit provided to be sorted, even though the rollers remain fixed in any position in which they may be originally placed. [469]

Q. 43. Do you mean that each of the end-to-end rollers are provided with a series of steps?

A. Yes, sir. That is the way they were in the machine that I was informed was a California grader, and that is the way they are shown in this model.

Q. 44. I will ask you to again examine reissue letters patent 12,297, the patent in suit, and compare the machine as you find it therein disclosed and described with the machine disclosed by the model exhibit, and state such differences and similarities as you may find to exist between the machine of the patent in suit and the said model, and as between the invention disclosed by the claim No. 1 in the letters patent in suit.

Mr. LYON.—The question is objected to so far as it refers to the invention or to the first claim of the patent in suit, as incompetent, and not proper subject of expert testimony, being an inquiry as to a matter which it is for the Court to decide and interpret and not being the proper mode of proof; and the interpretation of the claim being for the Court

(Deposition of Edward S. Cobb.)

and not for an expert witness. There is no ambiguity and uncertainty in the claim.

A. I find in the model a fruit grader with transversely adjustable rotating rollers; nonmovable grooved guide lying parallel with the plane which passes vertically and longitudinally through the center of said rollers; that the said rollers and the vertical guide form a fruit run-way; that the rope in the groove in said run-way is provided with means for giving to it motion. I think that answers the question with regard to claim 1. [470]

Q. 45. (By Mr. ACKER.) My question was to point out such similarities that you may find to exist and, likewise, such differences.

A. In claim 1 the first member of the combination is a plurality—

Mr. LYON.—The same objection to the question.

A. —the first member of the combination called for in claim 1 is a combination of a plurality of transversely adjustable rollers; I find in the model a plurality of transversely adjustable rollers. The next member of the combination mentioned in the claim is a nonmovable grooved guide lying parallel with the plane which passes vertically and longitudinally through the center of said rollers. I find in the model a nonmovable grooved guide lying parallel with the plane which passes vertically and longitudinally through the center of said rollers. The next statement of the claim is that said rollers and guide form a fruit run-way. In the model the rollers and the guide will form a fruit run-way. In the claim

(Deposition of Edward S. Cobb.)

one member of the combination is a rope in the groove in said guide, and means to move said rope. In the model I find a rope in the groove in the guide and means to move said rope.

Q. 46. (By Mr. ACKER.) What difference do you find between the model and the machine described in the patent in suit, if any at all?

A. The first member of the combination in this claim calls for or uses this language: "In combination a plurality of independent transversely adjustable rotating rolls." In the model only the two ends can be independently adjustable. Any rolls lying between the two end rolls in the series of [471] end-to-end rolls receive adjustment to some extent whenever the rollers adjacent to them are moved, because adjacent rolls are in this model supported in a single bracket, which serves to receive or to support one end of each of these contiguous rolls.

One can adjust the first roll in this machine at either or both ends to any position they may deem desirable by moving the brackets provided for that purpose, and may do the same with reference to the last roll in the run-way of the series. The rolls intermediate between the two would take a position to conform to the adjustment made as mentioned.

Q. 47. You will please make the same comparison with reference to the machine that you find disclosed by claim 10 of the patent in suit.

Mr. LYON.—The same objection is noted to the preceding question when asked in relation to claim 1.

A. Claim 10 of the patent in suit reads: "In a

(Deposition of Edward S. Cobb.)

fruit-grading machine a run-way formed of two parallel members, one of said members consisting of a series of end-to-end rolls, brackets carrying the rolls, guides for the brackets and means for adjusting the brackets upon the guide, substantially as set forth." In the model I find a fruit-grading machine having a run-way formed of two parallel members, one of said members consisting of a series of end-to-end rolls. I find brackets carrying the rolls, guides for the brackets and means for adjusting the brackets upon the guides as set forth in claim 10 of the patent in suit.

Q. 48. (By Mr. ACKER.) How does the end-to-end arrangement of the rollers of the model exhibit conform to the end-to-end [472] arrangement of the rollers of the machine disclosed by the patent in suit?

A. In the model the rolls placed end-to-end, considering two consecutive rolls in the series, are supported by a bracket which acts as a common support of one end of each roll adjacent thereto. The connection between one roll and its adjacent roll is not so rigid as to prevent slight adjustment. In the patent in suit the arrangement of the rolls and their supports are such that either end of either roll forming the series of end-to-end rolls may be independently adjusted without effecting either end of any of the remaining rolls.

Q. 49. My question was, Mr. Cobb, how did the end-to-end arrangement of the rolls of the model compare with the end-to-end arrangement of the roll-

(Deposition of Edward S. Cobb.)

ers of the grading member of the machine set forth in the patent in suit?

A. So far as forming a run-way is concerned, they are practically the same. They are arranged as close together as mechanical construction will allow, so that there is in use a continuous run-way for fruit, and no space allowed for fruit of improper size brought through at an improper place.

Q. 50. You have described to me the construction of the model, and my question is, how does that compare with the arrangement of the end-to-end rolls of the machine disclosed by the patent in suit?

A. It has all the parts shown here that are shown there, and virtually in the same position relative to one another, and operating substantially in the same manner.

Q. 51. In the same manner as what?

A. As shown by and accomplished by the parallel members [473] of the run-way in the patent in suit.

Q. 52. What is the purpose or function of the transverse adjustability permitted the end-to-end rollers of the model, compared to the machine which you have testified to?

A. The object of transverse adjustment of the rolls is to vary the size of the opening between the rolls and the opposite parallel member of the grading device which, in this case, is the fixed grooved guide having the traveling rope, and the object of the adjustment of the rolls is to vary the distances between the rolls and the traveling member.

(Deposition of Edward S. Cobb.)

Q. 53. What is the function of adjustability of the end-to-end rollers of the machine of the patent in suit?

A. It has the same object in view, to change the distance between the rollers and the traveling member of the run-way.

Q. 54. Please examine claim 10 of letters patent in suit, and state whether or not you find any provision made or called for by such claim for independent adjustment or end-to-end rollers.

Mr. LYON.—Objected to as leading and suggestive of the answer; furthermore, that it is an inquiry addressed to matter which is for the Court to determine and not proper for expert testimony.

A. There is no means here mentioned as being independent adjustment of the rolls.

Q. 55. (By Mr. ACKER.) Please examine the model Defendants' Exhibit Parker Machine and state how the structure therein disclosed compares with the construction of the machine that you have examined as you have testified to in packing-houses.

A. The model exhibited here corresponds in its operative [474] features to the machines that I have seen in operation for grading fruit and which I have been informed was the Parker machine.

Q. 56. Please describe the construction and operation of the machine as represented by the model exhibit before you.

A. The machine consists of a run-way for fruit. This run-way is composed of a traveling member constructed in this case of a belt lying upon and being

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supported by two plane surfaces forming an angle with each other, the belt in this position forming the carrier for the fruit longitudinally of the run-way. This belt carrier may be made of one or two courses of belting, and receives its driving effort through the employment of a link belt chain to which the belts have been properly attached so that power may be applied to driving the belt at all portions of its length more uniformly than would be possible if the belt were driven solely from one end, the soft character of this belt being such that it would stretch in use much faster than the stretching due to wear would take place in a metallic chain. The fruit in falling upon or being fed upon this traveling belt, and the surface of the belt being inclined downward and away from the center of the width of the run-way, causes the fruit to impinge upon the sides of the run-way. The sides of this run-way are made up of two principal members. One of these members consists of a roller supported in brackets in such a way that the roller is revolvable about its longitudinal axis. The blocks are arranged so that their position and, consequently, the position of the roller, may be changed with reference to the traveling belt so as to leave an opening between the roller and the traveling belt, the size of said [475] opening being adjustable and determined by the position of the roller in reference to the belt. This roll with its supporting mechanism and means of adjusting its position, constitutes one member of the said construction of the

(Deposition of Edward S. Cobb.)

run-way. The other member of the construction of the side of the run-way consists of fixed pieces—and by fixed pieces I mean pieces that have no motion of themselves and no motion imparted to them in the operation of the machine. These fixed elements are composed of two separate pieces, one of which is attached to each of the adjacent sizing members previously mentioned. The opposite ends of these fixed pieces overlap and form between the sizing members a support for the fruit and a guide for the fruit as it is conveyed from one sizing member to the next sizing member. There are disposed along the machine a number of these sizing members on each side of the fruit run-way. These sizing members are adjustable lengthwise of the machine so that the distance between a sizing member and the next sizing member to it, longitudinally of the machine, may be varied, the object of this variation being to provide for the care of the fruit as sized when a large quantity of fruit of any particular size is passing into the machine and rendering it necessary to care for a large quantity of fruit of any one size in proportion to the whole run supplied to the machine. In the operation of the machine the fruit is deposited upon the traveling belt and travels along with said belt for the most part supported by the belt; but owing to the angular location of the belt, being out of level, the fruit impinges upon some element of the side of the machine. These elements, as I previously mentioned, consisted in one case of a sizing member and in the other case [476] of the fixed guiding

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member. When fruit of the proper size comes adjacent to the sizing member having a proper adjustment, the fruit will pass out through this sizing member. The larger fruit, not being able to pass out, will be carried along by the carrier, and, coming in contact with the fixed sides of the run-way will be conveyed along the run-way until it shall arrive at a sizing member adjusted to such size as to allow the fruit to escape from the run-way. This operation takes place on both sides of the center of the run-way and throughout the length of the run-way till the process of separation has been completed.

Q. 57. You have made mention in your last answer of a roller and of a sizing member. I will ask you to explain more fully what you mean by a sizing member as illustrated by the model. What parts go to making up the sizing member that you have termed a sizing member?

A. By way of explanation and to make my answer more clear, I wish to state that the fruit in this machine is sized by the space allowed for its passage between a longitudinally traveling member and a member located at a definite position along the run-way. This latter member I consider a sizing member and so call it, and will describe it as being made up of a suitable framework for supporting a roller. This framework as a whole is adjustable longitudinally of the run-way of the machine. The framework forms the support for blocks which are movable thereon, and these blocks support the axles or spindles of the roller, free to move in a rotating

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sense, and this roller free to move is *the opposite the member of the sizing device to the traveling belt or carrier above mentioned.*

Q. 58. What function does the roller sizing member to which [477] you have referred subserve in the machine represented by the model to which you are testifying?

A. The roller serves a purpose for determining the size of the opening through which the fruit may pass, and, at the same time providing the sizing edge of this opening with a movable sizing member, the object being to gain a measure of elasticity so that fruit very nearly the exact size of the opening would not be crushed in the endeavor to pass through the same.

Q. 59. Are any means provided for driving the rolls of the sizing member which you have testified to?

Mr. LYON.—Objected to as leading.

A. There are no means provided for driving these rolls, and they do not revolve except when in contact with the fruit. In fact, they are sometimes in contact with fruit when they don't revolve at all. If a perfect sphere were fed into the run-way the rolls would not be so apt to revolve as they would be when fruit of irregular contour is traveling along the length of the run-way.

Q. 60. (By Mr. ACKER.) Do you find in the fruit grader as represented by the model exhibit to which you have been testifying, a plurality of independently transversely adjustable rotating rollers?

Mr. LYON.—Objected to as leading.

(Deposition of Edward S. Cobb.)

A. No, sir.

Q. 61. (By Mr. ACKER.) State whether you find in said model exhibit a nonmovable grooved guide lying parallel with the plane which passes vertically and longitudinally through the center of said rollers. [478]

Mr. LYON.—Objected to as leading.

A. I do not.

Q. 62. (By Mr. ACKER.) State whether or not you find in the model exhibit the rollers of the character as to which I have asked and the guide of which I have asked forming a fruit run-way.

Mr. LYON.—Objected to as leading.

A. No, sir.

Q. 63. (By Mr. ACKER.) Do you find a rope traveling in a grooved guide-way?

Mr. LYON.—Objected to as leading.

A. No, sir.

Q. 64. (By Mr. ACKER.) Do you find in the model exhibit any means for moving a rope within a grooved guide-way?

Mr. LYON.—Objected to as leading.

A. No, sir.

Q. 65. (By Mr. ACKER.) Do you or do you not find in the model exhibited a fruit-grading machine having a run-way formed of two parallel members, one of which members consisting of a series of end-to-end rolls, brackets carrying the rolls, guides for the brackets, and means for adjusting the brackets upon the guides?

Mr. LYON.—Objected to as leading.

(Deposition of Edward S. Cobb.)

A. No, sir.

Q. 66. (By Mr. ACKER.) Do you find a grading member in the device in the model exhibited consisting of a series of end-to-end rolls?

Mr. LYON.—Objected to as leading.

A. No, sir.

Q. 67. (By Mr. ACKER.) Do you find end-to-end rolls in the [479] model exhibited?

Mr. LYON.—Objected to as leading.

A. No, sir.

Q. 68. (By Mr. ACKER.) Please state how the rolls which you have referred to as forming one element of the sizing member of the Parker machine as illustrated by the model, are arranged relative to each other.

A. Longitudinally of the machine. They are located at any desirable distance apart. They are placed at a distance apart longitudinally of the machine, conforming to the desire of the operator; and the space between each sizing member not occupied by any sizing devices is filled by overlapping fixed arms for the purpose of forming one side of the conveyor which in connection with the traveling member of the run-way forms a conveyor for carrying the fruit from one sizing device to the next sizing device of the series on the same side of the machine.

Q. 69. Please examine specifications of the letters patent in suit, beginning with line 42 and ending with line 60, and state whether you find in the model exhibited the elements of co-operating parts therein mentioned.

(Deposition of Edward S. Cobb.)

Mr. LYON.—Objected to as leading and suggestive of the answer, and not the best evidence, and calling for a mere conclusion of the witness and not for a statement of fact.

A. I have read the lines indicated in the question, and I do not find the elements therein described in the Parker machine.

Q. 70. (By Mr. ACKER.) Please examine Defendants' Exhibit Original Grade Unit and state how the adjusting means of the roller member of the unit compares with the adjusting means of the roller element of the sizing member in the model Parker [480] machine.

A. In the exhibit mentioned, "original grade unit," the adjusting devices consist of a block forming a support for the spindle of the roll. This block also partially includes a vertical support, and the block being supported and adjustable vertically by means of a screw supported by the previously mentioned vertical support, and having its threaded portion tapped into the block in such a manner that the revolution of the screw would cause the block to rise and fall, carrying therewith the roller. This screw is provided with a check-nut, the tightening of which prevents the screw from losing its position of adjustment during the operation of the machine. The device disclosed in the patent shows a roll the spindle of which is supported in the outer end of an extended bar, that bar itself being supported in bearings, in which bearings it is movable longitudinally. A longitudinal motion in these bearings is given to the

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bar by means of an extension of the bar being threaded and provided with a nut. The position of the nut with reference to the whole mechanism being fixed, any revolution thereof causes the bar to move forward or back in its bearing, carrying with it the end of the roller to which it is applied, thus giving a form of adjustment of that roller with reference to its parallel member.

Q. 71. I will ask the reporter to read the question.

A. It is not constructed in the same manner as disclosed in the patent in suit. The adjustments are possible and practical with the device shown in the Parker machine and also in the device shown in the patent in suit, but the methods of making the adjustments are different in both cases. [481]

Q. 72. I think you misunderstood my question. My question had no reference to the patent in suit. (Question 70 read by reporter.) Have you been answering with reference to the comparison between the original unit and the patent in suit?

A. Yes, sir.

Q. 73. I will ask the reporter to read the question. (Question 70 reread by the reporter.)

A. In the original grade unit I find the roller spindle supported in a block in such manner that the roller may rotate. This block is movable vertically on a vertical guide. This block is held in position and is adjustable upon this vertical support by means of a screw. This screw is supported by the vertical support mentioned, and has its threaded portion tapped into the body of the block. By the

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revolution of the screw the block is made to travel up or down its support. This screw is provided with a check-nut, the tightening of which will prevent the screw from losing its adjustment during operations. In the Parker machine exhibited in the model here, the rolls are provided with spindles which are supported in blocks. The blocks are supported and are movable along a vertical frame, and they are held in their vertical position on this frame by means of a screw, the threaded portion of which is tapped into the block mentioned. The ends of this screw are loosely attached to one end of the rocker-arm, the fulcrum of this rocker-arm supported upon a frame of the sizing member, and on the opposite end of the rocker-arm engages with a screw-bolt which may be hand operated and operates in such a manner that by turning this screw-bolt the ends of the rocker-arm rise or lower, and causes a reverse motion at the opposite end [482] of the rocker-arm to which the blocks supporting the roll are attached. The block at each end of these sizing rolls by means of its supporting screw may be independently adjusted with reference to the thumb-screw operating the ends of the rocker-arms by means of screw-bolts that engage the movable blocks there, or both ends of the roll may be brought to the desired position when both ends of the rocker arms are in engagement with the thumb-screw mentioned. Then any movement of the thumb-screw by the operator in charge of the machine will cause a similar and equal movement to occur at both ends of the roll

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of the sizing member, and the roll during these adjustments, when adjusted by the thumb-screw, will occupy consecutive positions. The new position occupied by the roll due to the operation of the thumb-screw, would be parallel to its former position.

Q. 74. Is the adjustment provided in the Defendants' Exhibit Original Grading Unit of the roller member of the unit substantially the same as the adjusting means provided for the roller member of the sizing unit of the Parker machine?

A. In defendants' original exhibit it is necessary to adjust each end of any one roll by itself; but in the model the rocker-arms make it possible to adjust both ends of the rolls with one motion and at the same time.

Q. 75. In function and operation, how does the machine of Defendants' Model California Sizer compare with the machine of the patent in suit?

A. The operation would be identical, as far as sizing the fruit is concerned.

Q. 76. How is the adjustment for the sizing of fruit [483] accomplished in the Bailey patent No. 671,646, to which you have testified yesterday?

A. The size desired for sizing the fruit in this patent is determined by adjusting the distance between the end-to-end rolls and the traveling carrier. This adjustment of the rollers is an independent adjustment of each roller, and independent also for each end of each roller. These adjustable members or the adjustable member has at its lower extremity a series of end-to-end short rollers which form by their

(Deposition of Edward S. Cobb.)

circumferences and the distance between their circumferences and the traveling member the sizing space. These sizing end-to-end rollers are free to revolve, and they are all placed end to end with reference to each other, and regardless of their distance from the traveling member.

Q. 77. Please state the character of the fruit run-way which is disclosed by the said letters patent.

A. The fruit run-way disclosed in this patent is circular in plan view; and in sectional elevation this run-way shows inclined surfaces which cause the fruit as it is being conveyed about the run-way to impinge upon the end-to-end rollers forming the sizing mechanism so that the fruit will pass out of the run-way upon its arrival at that portion of the run-way where the distance between the traveling member and the adjustable roller will admit of its discharge from the run-way.

Q. 78. How is the outer member of the fruit run-way formed in the patent you are referring to?

A. It is formed in exactly the same way as the inner member, except that it is concave in form instead of convex. Its operation is virtually the same and its adjustment can be made [484] in the same manner.

Q. 79. How are the rollers to which you have referred arranged?

A. They are arranged to be automatically revolvable by contact with articles being moved by the carriers, and they are adjustable vertically, and are located closely end to end, so that there is no space

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between one series of sizing rollers and the next series of rollers. There is no space between these adjustable members that is not available for sizing fruit.

Q. 80. What purpose do the rolls which you have referred to as disclosed by this patent perform?

A. They prevent the fruit from being injured while passing out of the run-way between the traveling member and the support of the rolls. The circumference of these rolls forms one element of the sizing member.

Q. 81. Are the sizing members independently adjustable toward or from the propelling member?

A. The sizing members are adjustable toward and from the traveling member of the run-way.

Q. 82. The question is are they independently adjustable?

Mr. LYON.—Objected to as leading.

A. They are independently adjustable and they are all end to end, relative to each other.

Q. 83. (By Mr. ACKER.) What sustains the rollers of each grading section?

A. They revolve about a shaft fixed to the adjustable member of each grading section. On each of these shafts there are a series of end-to-end rolls, the hole being so [485] arranged that the sizing edge of the adjustable pieces prevents a roller surface to the fruit being operated upon.

Q. 84. Please compare the apparatus shown and described in the reissue patent 12,297, the same being the patent in suit, with the device you find dis-

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closed in the Bailey patent No. 671,646 of 1901, and state such differences and similarities as you find exist between the two.

A. In the Bailey device 671,646 I find a fruit grader having in combination a plurality of independently transversely adjustable rotating rollers and a travelling member having motion parallel to the direction of the adjustment of these rollers, the rollers and the travelling member forming a fruit run-way. I find in this fruit-grading machine a run-way formed of two parallel members, one of said members consisting of a series of end-to-end rollers, supports for said rolls and means of adjusting the rolls upon the supports.

Q. 85. You have read the testimony of the witness Stebler and the witness Knight presented on behalf of the complainant? A. Yes, sir.

Q. 86. What have you to state regarding the testimony of the said witnesses as to the rollers of the Parker machine being end-to-end rollers?

A. Their statement that they are end-to-end rollers in the Parker machine is an error.

Q. 87. Give the reasons for your differing with said witnesses.

A. The Parker machine discloses a fruit run-way composed of three parallel elements, one a travelling carrier, one of them a sizing mechanism for the fruit being operated upon, and one of [486] them a fixed guide serving as a portion of the conveying means for carrying the fruit from one sizing device to the next following sizing device. In the machine

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disclosed in the patent in suit the run-way is composed of two parallel elements, one of which is the travelling member and the other of which is a series of end-to-end rolls. These end-to-end rolls do not show any available unoccupied grading space between their extremities.

Cross-examination.

(By Mr. LYON.)

Q. 88. For how long, Mr. Cobb, have you been familiar with orange packing-house machinery?

A. I have looked into and watched the operation of packing-house machinery frequently in the last five or six years.

Q. 89. Have you been around in Orange, San Bernardino, Riverside and Los Angeles counties in the orange packing districts very much during those years?

A. I have not made a specific business of visiting the packing houses, but I have travelled somewhat in these counties and have stopped at packing-houses for the sole purpose of watching the machinery operate as a matter of interest to me, being in the mechanical business, and the business of sizing oranges and packing them is one that is extremely interesting to me; and on every opportunity I have had since I have lived in Southern California I have always entered a packing-house and watched them carry on their business. But only on two occasions have I ever made a specific visit for the specific purpose to packing-houses. [487]

Q. 90. And what were those occasions?

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A. One of those occasions was when I went with Mr. Acker and Mr. Parker to a number of packing-houses located in the neighborhood of Charter Oak and San Dimas, and another when I made a visit with them to a packing-house at Rivera.

Q. 91. That was for the purpose of preparing to give your testimony as an expert witness in this case?

A. For the purpose of familiarizing myself with the machines that I could see at those places.

Q. 92. For what purpose?

A. To prepare myself to describe their operations in connection with this suit.

Q. 93. Where did you ever see a machine in operation built in substantial accordance with this exhibit Bailey patent No. 671,646.

A. I have never seen one of those in operation.

Q. 94. Have you ever seen one of those machines?

A. No, sir; I never saw one of those machines.

Q. 95. Where was the California grader that you said you saw and of which the model exhibit to which you have referred is a substantial reproduction?

A. I am unable at this moment to give you the name of the packing-house, but I can describe its location to you. It was one of the north and south roads in the neighborhood, I think, of San Dimas. It was in a packing-house that stood in its main dimension east and west, and the machine itself was standing near the north wall of that packing-house, and standing in a direction north and south, and located in reference to the packing-house very nearly

(Deposition of Edward S. Cobb.)

its northeast corner. [488]

Q. 96. Do you know what kind of fruit graders were in use at the packing-house?

A. There was no machine in operation in that packing-house on the day that I was there that I remember at all. The machine that was in that packing-house that I paid particular attention to was the machine of which that is a model.

Q. 97. You mean the California grader?

A. Yes. It was not in use. It was off to one side and all dusty and dirty. I had quite a nice opportunity to climb over it and look at it.

Q. 98. Are you interested in any manner in the orange industry?

A. None at all, in no way, shape or form. I don't even own an orange tree.

Q. 99. I suppose you are here as an expert witness under pay, as is usual in such cases, are you not?

A. There has been no specific arrangement made about pay. I expect to get paid for my services.

Q. 100. (By Mr. ACKER.) You will be paid the same as any other witness is paid? A. Yes, sir.

Q. 101. (By Mr. LYON.) Are you paid as consulting expert in this matter?

A. As I say, nothing has been said between us about the matter. I might say the reason for that is this: I have been acquainted with Mr. Parker some, and they wanted me to come and testify in the case, and I said, "I will go and we will fix the matter up later." That is about all the dickering there has

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been done. The same as I might do with anybody that I was [489] acquainted with.

Q. 102. I don't mean to cast any aspersion on you from the fact that you are paid as an expert witness. But you are not here as an interested party in this litigation or as a mere fact witness.

A. I am not here as an interested party at all in a financial sense or in any sense like that.

Q. 103. And you are here to testify as an expert witness on behalf of Mr. Parker?

A. Yes; to the best of my knowledge and belief.

Q. 104. Referring now to the California grader, if you adjust one of the brackets at the outer end, of either the end rollers or sections of that machine, how many sizes or grades of fruit do you adjust?

A. If I adjust one end of this roll?

Q. 105. Yes. That is, the outlying end.

A. In this model, here?

Q. 106. Each section in the model has three stepped portions of different diameters?

A. In the model each of the rolls forming one of the run-way members is made with three different diameters.

Q. 107. How could you adjust any one of these three sections or rollers, if you prefer to call them separate rollers, and effect a change in the size of the grading-way as to one grade or size of fruit only?

A. You can't do it.

Q. 108. You can in the machine illustrated and described in the Strain reissue patent No. 12,297, the patent here in suit, can you not? [490]

(Deposition of Edward S. Cobb.)

A. Yes, sir.

Q. 109. Then when you have stated that the California grader and the device of the patent in suit are substantially the same, you eliminated from consideration the difference which we have just pointed out, did you?

A. The California grader can have its roller members adjusted to any specified size and it can be constructed so as to deliver any specified size of fruit, and do it in substantially the same manner as the reissue patent is supposed to do. The difference lies in the fact that every size of fruit in the reissue patent would have a separate roller for its measurement. In the California grader the sizes of fruit discharged are determined largely by the different diameters of the sections of rollers.

Q. 110. Then as a consulting engineer and expert, you would consider the California grader an equally efficient machine with the machine of the patent in suit? A. No, sir.

Q. 111. Why not?

A. Because when the rollers are either one of them adjusted, it changes more than one size in the grading of fruit or sizing of fruit, and because there are no means provided in the California grader for having more than one discharge opening for the same size of fruit.

Q. 112. Is that a desirable feature in fruit graders, based upon your observation and experience?

A. I think it is.

(Deposition of Edward S. Cobb.)

Whereupon the further taking of testimony herein was adjourned until 1:30 o'clock P. M., at the same place. [491]

On Thursday, May 2, 1912, at 1:30 o'clock P. M., the further taking of testimony herein was resumed, pursuant to the adjournment.

Whereupon EDWARD S. COBB was recalled for further cross-examination, and testified as follows: (By Mr. LYON.)

Q. 113. Referring to the model of the Parker machine, you have termed the overlapping arms fixed guiding members, in some of your answers on direct examination. You will note that these guides, guide-arms, are attached to the metal casting by a set screw in such manner that they may be adjusted up or down. Is that not a fact?

A. They are fastened by set screws in this model. I don't know what the object in fastening them that way is, particularly except, I should judge, to remove one, if you wanted to remove it.

Q. 114. And by loosening this set screw a certain amount of vertical adjustment may be secured in these arms, can it not?

A. It depends upon the position of the roll overhead. There is one there in sight that you could not move upward, from this point of view.

Q. 115. If the roll were high enough you could adjust these upward or you could adjust them downward, could you not, with this mechanical construction?

A. Enough to clear the moving member and be so

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that they would not come in contact with the moving element.

Q. 116. (By Mr. ACKER.) What do you mean by "the moving [492] element"?

A. The belt, the carrier.

Q. 117. (By Mr. LYON.) Now, granting, for the sake of argument, that these fixed guiding arms or members could be adjusted vertically a sufficient distance for the purpose, would it, in your opinion, based upon your experience in this art, be practical to utilize these fixed guiding members or arms as one side of a grading opening permitting a certain sized fruit to be discharged underneath one of these arms and between the lower edge of such arm and the traveling belt? A. No, sir.

Q. 118. Why not?

A. Because it presents a rigid and inelastic or immovable edge to the material to be sized.

Q. 119. Why is that disadvantageous in a grader?

A. You bruise the fruit.

Q. 120. Then you consider it necessary, do you, that in a practical grader operating upon this principle of operation the members should be in roller form.

A. They should be elastic or slightly movable, and the roller form gives a cheap and ready form for making them that way.

Q. 121. The movement that you refer to should be what?

A. As nearly as possible or practical to attain, the same direction as the fruit is taken at the time. ✓

(Deposition of Edward S. Cobb.)

Q. 122. The object of the moving of that member of the run-way is to prevent the pinching of the fruit?

A. It might not prevent slightly pinching it, because unless the fruit was in sufficient contact with the roll the [493] roll would not turn at all, but it would prevent abrasion of the fruit to a destructive extent.

Q. 123. In the grading of the fruit, what function is performed by the overlapping arms in the Parker grader? A. None whatever.

Q. 124. It simply forms a nongrading space?

A. No, sir; it forms one side or guiding carrier which in connection with the travelling belt makes a complete carrier to convey the fruit from one sizing element to another.

Q. 125. All the grading is done between the rollers and the belt, in the Parker machine, is it not?

A. Yes, sir.

Q. 126. You will note that I have now placed before you on the floor, standing in upright position Defendants' Exhibit an Original Grading Unit and the new form of grading unit used in the Parker machine. As thus arranged on the floor before you, in what relation are the two rolls?

A. Just as they stand, do you mean?

Q. 127. Yes. A. Practically parallel.

Mr. ACKER.—Note on the record that the two models stand in parallellism on the floor.

Mr. LYON.—And about eighteen inches or two feet apart.

(Deposition of Edward S. Cobb.)

Q. 128. Would you say that these two rolls are disposed one above the other as they now stand?

A. No, sir.

Q. 129. I now take one of these devices and turn it at right-angles to the other, the center of the roll being approximately 18 inches or two feet away from the end of the other roll. In [494] what relation would you say these rolls now stand to each other? A. At right angles to one another.

Q. 130. Are they transverse to each other?

A. Yes.

Q. 131. The two rolls are both in the same horizontal plane, practically, at the present time, are they not?

A. By raising the south roll there they could be brought all into the same plane.

Q. 132. They now occupy possibly an inch or so out of the same, but both are in horizontal planes?

A. Yes.

Q. 133. Save and except as to the horizontal plane, what difference would the position which I now place one of these rolls in make in your description of the position of the rolls, noting that one of these rolls now runs horizontal and the other vertically, the vertical roll being disposed about 18 inches or two feet away from the horizontal roll and mid-length of the roll?

A. I would say the rolls were in planes at right angles to one another.

Q. 134. Are they transverse to each other?

A. Yes.

(Deposition of Edward S. Cobb.)

Q. 135. I now arrange them about two feet apart. In what position with relation to each other, speaking in the same senses that we have in the last few questions, are they now?

A. They are in the same line with one another.

Q. 136. Are the ends of each of these rolls disposed toward the end of the other roll? [495]

A. Toward it; yes, sir.

Q. 137. They are end toward end, are they not?

A. Yes, sir.

Q. 138. I now dispose of them one directly above the other. In making a similar description of their position, what term would you now use?

A. I would say they were parallel one above the other.

Q. 139. Referring to the Defendants' Model California Grader, you say there are three rolls on each one of the sides of the run-way in this model.

A. Three sections making one, practically, one roll throughout the length of it. There are three sections here, placed end to end, making, so far as carrying surface is concerned, one continuous carrying element.

Q. 140. If we remove the center section or roll, aren't the first and third rolls still end to end, so far as a description of their position with relation to each other is concerned?

A. No, sir; I don't consider it so.

Q. 141. Are they one above the other?

A. No, sir.

Q. 142. Are they transverse to each other?

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A. No, sir.

Q. 143. Are they at right angles to each other?

A. No, sir.

Q. 144. Or any other angle to each other?

A. Yes, sir.

Q. 145. What angle?

A. 180 degrees. They are in a line with one another.

Q. 146. And two rolls placed end to end, or 180 degrees, [496] are in line with each other, are they not?

A. Not necessarily; but in that case they are.

Q. 147. (By Mr. ACKER.) You mean by referring to "that case," when the middle roll has been removed?

A. Yes; they are in line with one another but they are not end to end.

Q. 148. Do you mean speaking with the middle roll removed as you were asked concerning?

A. With the middle roll removed, the two remaining rolls would be in line with one another.

Q. 149. In order that the record may be clear, I would like to ask, when you say "in line" do you mean in horizontal alignment—longitudinal alignment, I mean?

A. Yes; I mean in the direction of the roll they are in line with one another; they continue in the direction of one roll and they come approximately in line with the other roll.

Q. 150. (By Mr. LYON.) Taking the two rolls of the Parker machine and placing them in longi-

(Deposition of Edward S. Cobb.)

tudinal alignment, are they now end to end?

Mr. ACKER.—Counsel for defendants wishes to now state that complainant's counsel is holding the rollers so that the end of one roller abuts to the end of the adjacent roll to within the separation of the small metallic—metal—shown.

A. They are; but not as close to one another as could be constructed, and not sufficiently near to prevent fruit of improper size from dropping between them and the parallel members of the run-way.

Q. 151. (By Mr. LYON.) I now remove them four inches further away. Are they still end to end? [497]

A. No, sir; they are in line with one another.

Q. 152. What do you mean by "end to end"?

A. In close contact.

Q. 153. That is, your understanding of the term "end to end" is in close contact, is it?

A. As close contact as it is possible to bring them.

Q. 154. Then, as you use the term "end to end," it means without material distance between the two ends of the rollers. Is that correct?

A. That is correct. I mean to have the distance between the rolls such that there is no space not suitable for sizing space, through which fruit being sized could drop into an improper sized receptacle.

Q. 155. Referring now, to the Defendants' Exhibit Model of the Parker Machine, and particularly to the traveling belt, that belt travels in a horizontal plane, does it not?

A. An inclined horizontal plane.

(Deposition of Edward S. Cobb.)

Q. 156. And the grading rollers are mounted transversely of that plane, are they not?

A. No, sir; they are parallel to it.

Q. 157. Referring to the rope or belt and the roller in the Defendants' Exhibit, upon the California grader, is the same true there?

A. They are parallel with the rope.

Q. 158. They are not transverse to it?

A. No, sir.

Q. 159. But in both of these devices, to wit, Defendants' Exhibit Model of Parker Machine and Defendants' Exhibit Model of California Grader, the rollers are transversely adjustable [498] with respect to the belt, are they not?

A. Yes. I would like to add something to that reply so as to make myself clearly understood later on. Take the California grader: The roll is adjustable to and from the rope forming the other member of the grader and they lie in the same plane—the axis of the rope and the axis of the roller lie in the same plane, that plane being, ordinarily, horizontal. In the Parker device the roll is adjustable in a plane other than the plane occupied by the carrier belt but the roll in the Parker machine is adjustable to and from the carrier belt but not in the same plane with it.

Q. 160. You have examined the specification of the Strain reissue patent in suit carefully, have you not? A. Yes, sir.

Q. 161. Are you thoroughly familiar with the drawings thereof? A. Yes, sir.

(Deposition of Edward S. Cobb.)

Q. 162. Is there any statement in the specification of the said patent in suit indicating to you that it is necessary to mount the independently individually adjustable rollers of the Strain machine in the same horizontal plane with the belt?

A. All the functions claimed from the operation of the machine would not be possible unless it were practically so.

Q. 163. What function would not be possible?

A. For example, suppose the rollers shown in the patent referred to were vertically over the rope. Then the rope would exercise no carrying capacity for the fruit in the run-way and the roller could be at a considerable angle out of plumb over the rope and still the rope would be useless as a [499] carrier to convey fruit along the run-way. If the roll were set so that its axis were not parallel to the axis of the rope it would have different sized openings along its length on the same roller.

Q. 164. Have you given as complete an answer to the preceding question as it is possible for you to do pointing out each and all of your reasons therefor? Let the record show that the question and answer was read to him. (Question 163 and the answer thereto were read by the reporter.)

A. I would need further study to make a full and complete answer, because I would like to show the positions that I could place the roller in other than that shown in the patent and describe the results that would take place from trying to operate in those positions.

(Deposition of Edward S. Cobb.)

Q. 165. The same mode of operation would be maintained, if the orange rested on the rope and impinged against the roller and was thereby supported, regardless of whether *or the* roller and the rope were in identically the same plane or the roller slightly or materially above the plane of the center of the rope, so long as the fruit was maintained on the belt and impinging against the roller, would it not?

A. Yes. That is right.

Q. 166. Is there anything in this specification of this patent in suit which states that the rollers may be stepped rollers?

A. There is nothing in the specifications in the patent in suit that determines the form of the rollers in their longitudinal cross-section.

Q. 167. What do the drawings show? [500]

A. A straight cylindrical roller.

Q. 168. You say that in the device of this patent the run-way is made of two parallel members. What do you mean by the term "parallel" in that sense?

A. I mean that the axis of the rolls in the patent at issue and the axis of the travelling rope are parallel.

Q. 169. The axis of each separate roll, you mean, and not of all of the rolls combined?

A. Well, the axis of all the rolls must be parallel to the rope.

Q. 170. Yes, but the axis of each roll is not necessarily in the same horizontal plane and could not be and get the independent adjustment, could it?

(Deposition of Edward S. Cobb.)

A. Yes; it could do that, but they might not be all in line. They can be all in the same plane.

Q. 171. With each other? A. Yes.

Q. 172. And be parallel with the belt? A. Yes.

Q. 173. And the—

A. Be parallel to the rope, as I said.

Q. 174. And at different distances from the rope?

A. Yes, sir.

Q. 175. Explain such an arrangement as you have last stated.

A. If I had a piece of paper I could represent it better than I can state it.

Mr. ACKER.—You had better make a carbon of this.

A. (Witness draws sketch in duplicate.) There it is.

Q. 176. (By Mr. LYON.) Referring now, to the Parker sizer [501] as exemplified by defendants' exhibit the model here before you: Assume, now, that we are referring to a vertical plane which passes vertically through the center of the rolls, or one of the rolls, forming one side of the run-way, how is the groove at the apex of the support for the traveling belt disposed with relation to the plane that I have just referred to?

A. There is no groove at the apex of the traveling belt as an element of that machine that I recognize.

Q. 177. Will you please step here and examine this?

A. I know that there is a recess there for the chain to occupy, but I don't recognize it as a groove or a

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guide in this machine.

Q. 178. There is a groove, is there not, there?

A. There is a recess or opening so that a chain may travel on there without holding the—the chain I referred to this morning as giving power to these belts may travel along without raising the belt from its supporting surfaces.

Q. 179. And that groove is how disposed with relation to the plane that I just referred to?

A. Parallel to it, in one direction.

Q. 180. Parallel with it in the direction of the longitudinal extension of the machine? A. Yes.

Q. 181. And the chain that you have referred to runs in this groove, does it not?

A. It need not run in the groove. It has to have a recess. It is preferable in practice to have a space for that chain to occupy out of the line of the surface forming the support for the travelling belts. The sides of this opening [502] making room for the chain need not come in contact at all with the chain, and that opening might be bottomless, so far as the chain is concerned and so far as the operation of the machine is concerned. The only object of the chain is to give added strength, I may say, to prevent extraordinary stretching in the belt during operation, and, as I explained this morning, to give power to the belt throughout its length without, in use, having to take up so much stretch; and the chain does not act as a guide for the belt.

Q. 182. Will you now please answer the question, which is: "The chain in the Parker machine runs

(Deposition of Edward S. Cobb.)

in this groove to which I have referred, does it not''? I refer to the machines as they actually have been made and constructed and as you have seen them, and not with hypothetical changes which you may make and consider essential or nonessential. I am asking you as to the mechanical fact as to what existed.

A. The chain in the Parker machine travels in a path parallel to the axis of the rolls on the sizing members.

Q. 183. And that path in the actual machines is a groove below the surface of what would be the apex had the material not been cut away? Is that not true?

A. It is not proved to me, because in machinery I have seen I could not say, and I am quite sure that the chain didn't fit the groove.

Q. 184. Did I ask you if the chain fitted the groove?

A. It would have to be if it was a guide.

Q. 185. Did I ask you if it was a guide?

A. I think so.

Q. 186. Re-read the question to the witness. (Question 182 [503] read by the reporter.)

A. My conception of anything running in a groove is that it reasonably fits the groove and not that it runs in a space of the form of a groove—whose exterior boundaries may be in the form of a groove. That is why I say that that chain does not run in a groove.

Q. 187. There is a groove there, *isn't* there not?

(Deposition of Edward S. Cobb.)

A. There is a space there that you can call a groove, but the chain does not fit it, and that is why I claim that the chain does not run in a groove as a guide. That is why I said that before.

Q. 188. There is a groove at the apex of the two inclined sides of the run-way in the Parker machine, is there not? A. There is a slot there; yes, sir.

Q. 189. And what part of the machine operates along that slot?

A. A chain that drives the belts.

Q. 190. And that slot I believe you stated is parallel to a vertical plane extending downward through the rollers and also extending longitudinally of the machine. Is that not correct? A. Yes, sir.

Q. 191. Each of the rolls of the Parker machine are independently adjustable with each other, are they not? A. Yes, sir.

Q. 192. What is the purpose of adjusting one of the rolls of the Parker machine?

A. To adapt it to discharge fruit from the run-way of a certain size. [504]

Q. 193. About how long were the Parker machines which you have seen?

A. You mean the total length of the machine from where the fruit enters until it leaves?

Q. 194. Yes.

A. I should think one of them that is particularly strong in my mind was about 30 feet.

Q. 195. That would be about the length—

A. I don't think it was over 30 feet.

(Deposition of Edward S. Cobb.)

Q. 196. —the length of the grade-way, approximately 30 feet?

A. I can't recall the length of that machine to save my life, and I walked back and forth it a great many times, too. But it was somewhere in that neighborhood. No, I think at that time there were other attachments; what makes me mystified about guessing the length of it, there were other carrying devices for carrying boxes, and every time I went around the machine I had to go around those carriers and I am a little mixed in my mind about how much of the distance that I walked was taken up by the box carriers—not a part of the machine but only devices for carrying boxes, and that has got me mixed on the total length of the machine itself.

Q. 197. Well, would it be a safe statement for you to make that the run-way of the Parker machine is not less than 25 feet?

A. No; I don't think I would say that. As I stood there at the end of the run-way looking up to the oranges feeding in—I don't want to say how far it was—I took oranges, as I told you before, from the boxes and put them back through the machine several times after I had marked them to see if they discharged [505] always into the same box; and I went back and forth there a great many times, at one particular visit that I made there, and went the length of the machine a great many times, but I didn't pay any attention to the length of it and I don't want to go on record as saying how long that machine was.

(Deposition of Edward S. Cobb.)

Q. 198. You don't know how many of the rotating rollers at the side of the run-way there were?

A. No; I didn't count them. There were a number on each side, but I didn't count them. I was not there taking any sizes of the machines at all or taking any dimensions of it whatever.

Q. 199. What devices were there in that machine for preventing the inclined canvas belts from sagging downward on the inclined supports of the run-way.

A. They were attached to each other at the top of the roller.

Q. 200. Were they attached simply to each other?

A. They were attached to each other and also to a driving chain.

Q. 201. The driving chain that we have spoken of? A. Yes, sir; I think so.

Q. 202. Would the weight of the fruit pulling on the inclined belts downward on one side of the machine have any effect whatever upon the driving chain?

A. I don't believe that it is necessary to have any means for preventing the canvas belt from working down the incline. I don't think it has a tendency to work down the incline as it propels the fruit along. If it is in the machine tight and kept snug the way it has to be to operate well, and is sewed to [506] its companion member, it wouldn't work down the incline. There is just as much tendency for the carrier in the run-way to work down one incline as

(Deposition of Edward S. Cobb.)

down the other, and it would stay, in my judgment, as a rule.

Q. 203. You never saw one of the Parker machines, then, except with the double grade-way?

A. No; I don't think I ever did. I know I have not closely gone into one that didn't.

Q. 204. What would be the tendency in the respect you have just referred to in the single grade-way machine?

A. I think there would be a tendency to work down the incline.

Q. 205. None whatever?

A. I think there would be a tendency to work down the incline in a single run-way.

Q. 206. What would stop that or counteract that tendency?

A. You would have to maintain the higher edge of the belt in some fixed line by some method, or you would have to have the carrier belt of sufficient rigidity so that the lower edge coming in contact with the rollers would maintain it in proper position.

Q. 207. Then, in such a Parker machine, with the single-side run-way only, with a chain and a groove such as is exemplified in the Defendants' Exhibit Model Parker Machine, what effect would the weight of the fruit on the inclined belt on that single sided run-way have towards making the belt pull against the side of the groove?

A. The belt is not in any groove, so it wouldn't pull the belt against the side of any groove. [507]

Q. 208. Well, the chain, then?

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A. If the chain was sufficiently taut in its length it would give a very material support to the sagging tendency of the carrier-belt and might altogether prevent it from sagging seriously.

Q. 209. And if the chain were not sufficiently taut what would be the action in that construction?

A. The sagging would take place to some extent and the chain might or might not come in contact with the edges of the slot in which it has room to travel, or it might, in taking some sagging, arrive at sufficient tension to make a proper support for the belt.

Q. 210. You have said that the rollers in the Parker sizer were sometimes in contact with the fruit without revolving. When does that occur?

A. It is a little difficult for me to answer that question, for this reason, that standing beside the machine and watching the fruit travel down the runway and being sorted by the sorting device, I have seen fruit pass through the sizers and other fruit pass by a sizer without the roll revolving and also when it was revolving. Consequently I know that sometimes it revolves and sometimes it does not. So, to catch with my eye the exact cause of that, I could not do it, and to sit and work it out on a theory would require making drawings, and perhaps be a little difficult to explain, anyway, because the fact that the carrier belt travels and the roll being free to travel on its periphery—in one direction, at any rate, in the direction of revolution—the slightest contact with a moving body there might make a mo-

(Deposition of Edward S. Cobb.)

tion in the roll, no matter what direction that [508] moving contact was unless it were exactly parallel to the axis of the roll.

Q. 211. Then, you have seen the oranges, when being graded on a Parker sizer, pass along one of the run-ways passing by one of the rollers while that roller was rotating?

A. Well, not rotating by any power device.

Q. 212. No, but turning around. That is rotating, is it not?

A. Yes. I have seen the roller moving as fruit was passing by it.

Q. 213. Now, what sized fruit was that, with relation to the opening between that particular roller and the belt?

A. All the fruit that went by was larger fruit than the opening.

Q. 214. And the roller was turning around. You seem to object to the term "rotating."

A. Well, because it didn't always go clear around. Sometimes go a little one way and sometimes another, according to how an article of fruit struck it.

Q. 215. Then let us use the term "partial rotation." Do you still object to the term "rotation," or simply that it was not a complete revolution, necessarily, that you observed of the roll?

A. I will try and tell you exactly what I observed, and you can get it in your own way. I observed that the rolls swung back and forth on their axis as fruit passed by them, and I didn't know whether it was due to the fact that the fruit was passing them or

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due to the fruit that was passing between the roll and the carrier. The operations were going on [509] simultaneously, and, as I tried to describe before, I don't know which of these things was making the roller move.

Q. 216. When you observed the movement—call it rotation, revolution or whatever you may prefer—of these rollers in the Parker machine, did you observe any necessity whatever for the use of any means for positively rotating such rolls?

A. I didn't pay any attention to that feature of it at all. I was watching more carefully—I was trying to keep my eye more on the fruit than I was on any one thing else at the time I was making this particular inspection, but I did observe the rolls move.

Q. 217. Then your observation of the Parker machine was not sufficiently full and complete to tell us whether as a matter of mechanics there is any necessity in a Parker machine for means for positively rotating the sizing rollers?

A. From my observation of the machine I would say that there was no necessity for operating the rollers.

Q. 218. And why do you express that opinion?

A. Because it seemed to operate so well and return the same fruit to the same bins without power-drive rolls, as I would call it.

Q. 219. Was that, in your opinion, due in any degree to the use of a wide, flat carrying-belt?

A. I think the use of a wide, flat carrying member, as distinguished from a carrying member hav-

(Deposition of Edward S. Cobb.)

ing a circular section, like a rope, would give to average shaped fruit, otherwise not round fruit, a different motion as it bobbed along in the run-way than if that fruit only hit a carrier at some one point. Now, that does not quite express clearly what I want to say, [510] but I will try and make it a little clearer by assuming you had a fruit the shape of a lemon, more oblong than round. Such fruit could hit a rope at a point and move away from the rope, without remaining in contact with it; but fruit on a broad carrier like the belt would practically be in contact with it at some point of the fruit all the time. What I am trying to say is something on that order.

Q. 220. In other words, your idea would be that the wider the belt the more frictional contact there would be with the fruit, carrying it along, and the more positive it would be carried along? Is that it?

A. No; not more points of contact, because I don't think the contact is with the fruit at more than one point at any time.

Q. 221. Well, the breadth of contact.

A. But if the fruit moved a little bit away, from any cause, from the rope it loses its only chance of touching the rope.

Q. 222. Well, then, would you, from your observation, say that there was any absolute necessity for mechanically driving the roller, the grading roller or rollers, of the device of the Strain patent in suit?

A. Yes, sir; I think so.

(Deposition of Edward S. Cobb.)

Q. 223. Now, give us your reason for expressing that opinion.

A. My reason for expressing that opinion is this, that I can imagine an article of fruit taking such a position in the run-way as constructed in the patent in suit that it would fail to travel along in the run-way and be abraided by the continuous motion of the rope, provided, of course, that the [511] parallel grading member was not in motion.

Q. 224. And that is assuming, of course, that the parallel grading member or roller was mounted so that the center of the roller and the center of the rope were in practically the same horizontal plane, I suppose?

A. That is what I had in mind as I talked.

Q. 225. If, however, the roller were—

A. And forming part of the carrier.

Q. 226. If, however, the roller were mounted so that its center was disposed higher than the center of the rope, so that the fruit rested on the rope and impinged on the roller, the more of the fruit that rested on the rope the less of the tendency you speak of there would be? Is that not true?

A. Yes. The idea I believe you are after and which occurs to me from your question is that the more of the weight of the fruit that was carried by the carrier the less tendency there would be to stick, which is true, in my judgment.

Q. 227. That is, the tendency to stick was what you were referring to?

A. Well, it would have to stick to abrade it in the

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way I was trying to describe.

Q. 228. Now, in the fruit grader art, at the time that Robert Strain filed his application for patent in suit, to wit, in 1902, do you know whether or not the round belt or rope and the flat belt mounted at an incline were known mechanical equivalents and substitutes for each other?

A. I have heard that they were.

Q. 229. From your examination of the prior patents that you have made, and calling your attention particularly to [512] Defendants' Exhibit Ish patent, is it not apparent that they were calling your particular attention to Fig. 4 of the drawings thereof?

A. When I made my previous answer I had this drawing in my mind. I said in my previous answer I had been informed that they were equivalents because I had been informed by somebody that that had been so determined by some judge somewhere. I was not informed that they were equivalents by looking at that drawing; I was informed especially from that.

Q. 230. And the use of the flat and inclined belt is shown in this Ish patent that we have just referred to?

A. A flat belt laying in an inclined position.

Q. 231. With the roller having its center above a portion of the belt?

A. No, sir; that is not true. The roller is not above a portion of the belt in the Ish patent.

Q. 232. You have no knowledge as to whether it

(Deposition of Edward S. Cobb.)

was so constructed actually in the first Ish machines that were built, have you?

A. I never saw the first machine that was built under the Ish patent that I know of.

Q. 233. Do you know when the manufacturers of the Ish patent substituted the round belt or rope for the flat inclined belt? A. No, sir.

Q. 234. That was before your knowledge of the fruit grading art, was it? A. I don't know.

Q. 235. Well, I say, if it existed it was before your time—you know nothing of it? [513]

A. No; I know nothing of the history of the dates when the changes were made.

Q. 236. Referring, now, to Defendants' Exhibit Huntley Patent 538,330, I will ask you, Mr. Cobb, if it is not a fact that there is no traveling member forming one side of the run-way in this patent?

A. There is no traveling member having motion in a longitudinal direction.

Q. 237. What is the principle of operation of this device of the Huntley patent?

A. The machine, for fulfilling the requirements of this patent, consists of a parallel side cylinder or straight cylinder rotated about its longitudinal axis and having disposed near to it the concave guide or run-way, tapering in its section and located with reference to the axis of the cylinder so that one of the elements of the surface of the run-way is further from the axis of the cylinder at one end of the cylinder than it is from the axis of the cylinder at the other end of the cylinder, forming thereby, between

(Deposition of Edward S. Cobb.)

the element of the surface of the run-way and the element of the surface of the cylinder, a tapered opening, fruit being fed into the larger end of which, the larger fruit will become at a position where it will be in contact with both the run-way and the cylinder and the revolution of the cylinder will cause the fruit to jump out of the run-way.

Q. 238. This is not the same mode of operation that is utilized in either the California grader, the Strain grader, the patent in suit, or the Parker grader, is it?

A. No, sir. The fruit is thrown out of here forcibly, and it is sized in the reverse order from the other machines [514] mentioned.

Q. 239. Referring, now, to Defendants' Exhibit Jones Patent No. 430,031, is there any traveling belt or conveyor forming one side of the run-way in that patent?

A. There is no traveling belt and there is no traveling rope shown; but there is a spiral enveloped about one of the parallel members of the sizing device which, as said member revolves, will cause the fruit in the run-way to advance in the direction corresponding to the action of the spiral.

Q. 240. Would you consider driving arrangements through this run-way by means of this spiral device a practical device, or would it tend to bruise and injure the fruit?

A. I think in a machine constructed on the lines shown here and as shown in this patent, the spirals are unnecessary to cause the fruit to advance.

(Deposition of Edward S. Cobb.)

Q. 241. Why?

A. Because the sizing elements set at an inclined position.

Q. 242. And the fruit rolls down by gravity?

A. Well, it might. If it were not sufficiently inclined to make the fruit roll by gravity it would still advance, provided one of the parallel members of the sizing device were in rotation.

Q. 243. Then the principle of operation of this device is also different from the principle of operation of either the California grader, the grader of the patent in suit, or the Parker grader, is it not?

A. It is only different in the method of conveying the fruit along the run-way.

Q. 244. Well, that is an essential portion of the mode of [515] operation of each of the three devices I refer to, is it not?

A. I think not, because the sizing takes place between two parallel members, in all these cases, independent of how the fruit arrives at the particular sized opening.

Q. 245. Then, do you think that permitting the oranges to roll down such an inclined run-way would be practical in the grading of oranges?

A. Yes; I think it would work all right.

Q. 246. Did you ever try it?

A. No, sir. I see no practical reason why it should not work all right.

Q. 247. Did you ever see a machine built in substantial accordance with the specification or drawings of the Jones patent which you have just re-

(Deposition of Edward S. Cobb.)

ferred to? A. No; I never have.

Q. 248. In the grader of the patent in suit, are the rollers transversely adjustable with respect to the traveling belt or rope? A. Yes, sir.

Q. 249. Are not the rollers in the Parker machine transversely adjustable with respect to the traveling belt? A. Yes, sir.

Q. 250. These rolls in the Parker machine are not arranged side by side, are they, on a given side of the run-way? A. No, sir.

Q. 251. Would it not be, in your opinion, correct, in contradistinction, to saying that the rolls are arranged side by side, to say that they are arranged end to end? A. No, sir. [516]

Q. 252. Why not?

A. Because there is a space between them.

Q. 253. How much space must be between the rolls in order to avoid their being arranged end to end?

A. In order to avoid the rolls being placed end to end there must be sufficient space between the ends of two adjacent rolls to allow passing between them and the opposite parallel member of fruit of a size not intended to be passed at that point.

Q. 254. You have said that the rollers of the Parker machine were elastic or had proper elasticity. Isn't it a fact that in so stating you referred solely to the ability of the rollers to move on their shaft?

A. I referred to that action that takes place when the fruit comes in contact with the roller at a point where the roller is not a sufficient distance to allow

(Deposition of Edward S. Cobb.)

the passage of the fruit. If the fruit then is continued to be crowded toward the roller the roller will slightly revolve, relieving the pressure of the fruit against the roller. In that way I consider it as an elastic or—the surface of the roller becomes a surface that gives way, to a degree, from the pressure of the fruit, at the *same moving* from its original position to a new position, carrying the fruit with it and relieving, presumably, the pressure between the roller and the fruit.

Q. 255. Well, then, the action that you term “elasticity” is due to the roller form and the fact that that roller form can move on an axis?

A. Yes, sir. It is not due to anything but that—not to a fixed form. [517]

Q. 256. What would the continued crowding of the fruit against this roller result in if the roller didn't rotate?

A. The continued pressure of the fruit against the roller, if it didn't move, would have a tendency to crush the fruit.

Q. 257. The adjustment of the grading rollers lengthwise, in the Parker machine, has nothing to do with the size or grade of the fruit which is delivered from the machine between such roller and the belt, has it? A. No, sir.

Q. 258. Is it necessary in all three of the machines, the California grader, the grader of the patent in suit, and the Parker grader, to have some means extending continuously at the side of the belt against which the fruit or oranges impinges?

(Deposition of Edward S. Cobb.)

A. There must be in all three machines two points in contact with the fruit in order that it may be sized.

Q. 259. And it will not be sized except at such point as the opening between these two points is sufficient to permit the fruit to pass through? Is that correct? A. Yes, sir.

Q. 260. And in the Parker machine these openings are each individually and independently adjustable, are they not? A. Yes, sir.

Q. 261. And each of the openings in the California grader are not individually and independently adjustable, are they?

A. As shown here in the model each roller has three sizes of delivery—each section of roller has three sizes of delivery, and those three sizes as shown there are not independently adjustable.

Q. 262. In the Parker grader if you were to remove the [518] overlapping fingers or arms and place in their place another roller in the framework or brackets like those now shown on it, so as to fill that space, under your interpretation of the term would you not then have end-to-end rollers?

A. I would not have end-to-end rollers if there was rooms between the rolls, as then placed, for fruit to pass that was of a size not corresponding to the size called for by the rolls.

Q. 263. Then, if this series of rolls that I speak of had their ends abutting, they would be end-to-end rolls? Is that it?

A. If their ends abutted they would be end-to-end

(Deposition of Edward S. Cobb.)

rolls; yes, sir.

Q. 264. If they were in the same identical positions, except that the ends were one inch away, would they still be arranged end-to-end in the sense of the patent in suit?

A. Not if that inch space allowed fruit to drop through there of improper size.

Q. 265. Would they be arranged end-to-end if they were in the same position otherwise than the ends of the rollers being two inches away?

A. They wouldn't fulfill my definition of being end-to-end if there was space for fruit to pass through at that point that was larger than was intended to pass through the roll, of the fruit so approaching.

Q. 266. Then, taking the construction shown in the drawings of the patent in suit, and assuming that there were a series of rolls as therein described and shown in the drawings, say of eleven rolls, and the eleven rolls had their ends within a quarter of an inch of each other, the rolls being in longitudinal [519] alignment and every other roll was mechanically driven, positively, and the remaining rolls not driven mechanically, would they still remain a series of end-to-end rolls?

Mr. ACKER.—The question is objected to as calling for the consideration of a device which has not been shown to have ever existed and which is not shown or described in the patent in suit nor embraced in the issues of the present controversy.

(Deposition of Edward S. Cobb.)

A. Yes, sir; they would operate to distribute the fruit.

Q. 267. (By Mr. LYON.) Now, supposing that the rolls which I have assumed in the preceding question were not mechanically driven, were retarded from complete rotation and could only partially move on their axis, would they still remain a series of end-to-end rolls?

Mr. ACKER.—The same objection is noted as to the previous question.

A. No, sir.

Q. 268. (By Mr. LYON.) Then, your idea of those requires rotation—is that it—or movement?

A. My idea of a roll, as applied to these machines, is an element so constructed that at any cross-section all parts of its surface are the same distance from the center, and that, consequently, fruit coming in contact with it comes in contact with a point that is always the same distance from another fixed point and which the fruit may be in contact with as, for instance, the carrier.

Q. 269. In other words, so that the width of the run-way at that point is always the same unless adjusted manually? A. Yes, sir.

Q. 270. Suppose that every other one of these rolls, in the [520] arrangement suggested in the last illustration, were complete in roller form but fastened so as to rotate on their shafts, every alternate roll being free to revolve on its shaft and being suitably spaced from a traveling belt, would you still

(Deposition of Edward S. Cobb.)

say that the rolls constituted a series of end-to-end rolls?

Mr. ACKER.—Same objection as noted to the former questions.

A. No, sir.

Q. 271. (By Mr. LYON.) Why not?

A. Because you have taken motion entirely out of every alternate roll, leaving it then nothing but an ordinary guide, and fruit passing along under the conditions of construction shown in the patent at issue would be likely to clog at that point occupied by the dead roll and be injured by the continuous travel of the rope.

Q. 272. You are assuming in your last answer, of course, that the series of rolls that I speak of have been mounted with their centers in the same horizontal plane with the center of the belt, haven't you?

A. I assumed that because in your original question I think you referred to that patent as illustrating the mechanism you were discussing.

Q. 273. You have already stated, have you, in your cross-examination, that you found nothing in the patent which stated that these rolls must be so mounted, and in reply to one of my questions have stated that if the rolls were raised out of that plane the impingement of the fruit would be the same on the rolls, although more of the weight would be carried on that belt. Now, assuming the rolls were raised ten degrees, so that their centers were ten degrees above the center of the belt, and [521] assuming the conditions of the previous question, will

(Deposition of Edward S. Cobb.)

your answer still be the same?

A. Yes, if you talk belt instead of carrier-rope, because the results would be the same no matter what the position of the rolls are with reference to the belt, as regards angularity of elevation, provided the carrier would always maintain the fruit in contact with it. Then whether it tipped a little more or less would not make any difference with the clogging of the fruit.

Q. 274. In other words, it is a question of the fruit always contacting with the belt and in the position of the rollers which would make it operative or inoperative in the sense of clogging?

A. Whether it would destroy the fruit or not or clog; yes.

Q. 275. Assuming, then, that the construction were such as to always bring the fruit against the belt or rope, would the arrangement of the rolls last suggested by me be end-to-end, in your understanding of that term as used in the patent in suit?

A. As I remember the last arrangement suggested by you, every alternate roll was running in its position. In that case the machine would not be constructed with end-to-end rolls, under my interpretation of it.

Q. 276. Why not?

A. Because the filler piece between the two movable members which are actual rolls is simply a solid piece of circular cross-section.

Q. 277. It has the form of a roll, but not rotating. Is that it?

(Deposition of Edward S. Cobb.)

A. It has the form of a roll, but not the action of one. [522]

Q. 278. Now, suppose that it was desired to carry the fruit by such roller and not pass underneath it, such fixed roller or filler-piece as you speak of it, would perform the same function in carrying the fruit by as it would if it rotated, so far as the surface of the roll was of the same distance from the belt, would it not? A. No, sir.

Q. 279. Why not?

A. It would only in case there was sufficient weight of the fruit on the belt to allow it to be carried along.

Q. 280. And if there were sufficient weight on the belt to allow it to carry it along, it would?

A. To carry the fruit along.

Q. 281. And it would perform the same function as though it rotated at that time, then?

A. With sufficient weight on the carrier, whether or no this side piece moved or not, the fruit would be carried along.

Q. 282. And carried to the roll forming the proper sizing opening?

A. Until it arrived at a roll having the proper discharge opening.

Q. 283. You use the term "weight" in your last answer. Is it not true that all that is required is that the contact of the fruit with the belt be sufficient to carry it along?

A. It must be of sufficient intensity of contact to carry it without abrasion, and that intensity of contact is ordinarily brought about by the weight of

(Deposition of Edward S. Cobb.)
the fruit itself.

Q. 284. Yes, and it might vary—and the weight may vary with the different fruit and the required contact vary with the [523] different fruit, then, may it not?

A. The contact due to the given weight of fruit will vary with the angle of the carrying surface and the angle that its point of contact makes with the vertical.

Q. 285. In all of these machines, the California grader, the grader of the patent in suit or the Parker grader, the amount of the weight which is brought upon the belt depends upon the relative arrangement of the rolls with respect to the belt and the amount of impingement of the fruit on the roller, does it not?

A. That would be true in regard to the California grader and the patent in suit. I think not true in reference to the Parker grader, for the reason that a part of the Parker grader carrier or belt is used as a conveyor belt and does convey the fruit over or through portions of the run-way where there are no rollers.

Q. 286. You are referring in your last answer to the overlapping arms?

A. Yes; to that portion of it.

Q. 287. And so far as my question included only the rollers of the Parker grader and leaving out of consideration the overlapping arms, the same objection remains true in regard to all three graders, does it not?

(Deposition of Edward S. Cobb.)

A. I would like the question once more. (Question 287 read by the reporter.) As I understand that question, I would say that given an article of fruit of a certain known weight, at the time that it passes between the grading roller and the carrier mechanism in the California grader and in the machine constructed as shown in the patent in suit, it could exert a [524] much greater pressure between the moving carrier and the sizing roller than is possible to obtain in the same position in the Parker machine.

Q. 288. That does not answer the question.

Mr. ACKER.—I submit that the witness has answered the question fully.

Q. 289. (By Mr. LYON.) The witness has assumed in the last answer that the particular arrangement of the rollers in the California grader, in answering that question, is as shown in the model, and in the Parker device, as referred to in his answer, as shown in the Parker model, and not under the last conditions of the question. Having now called the witness' attention to my criticism of his answer, I will ask him this question: Is it not true in the California grader style of construction, in the construction and style of the patent in suit, and in the construction and style of the Parker machine, that the amount of contact—impingement or contact of the fruit upon the roller will depend upon the relative positions of the rollers with respect to the traveling belt? A. Yes, sir.

Q. 290. That is what I wanted in the beginning.

(Deposition of Edward S. Cobb.)

What difference, Mr. Cobb, in principle of operation of the machine, would it make in the Parker machine if instead of the straight overlapping arms between the rollers there should be substituted two telescoping cylinders mounted to revolve on any suitable device and these cylinders were kept so closely adjusted to the traveling belt as not to form a grading opening larger than is now formed between any given set of overlapping arms?

A. It would make no difference in the operation of the [525] machine.

Q. 291. You would then have end-to-end rollers in the Parker machine in that construction, wouldn't you? A. No, sir.

Q. 292. Why not?

A. Because the rollers—the telescopic cylinders that you have placed in the position of the overlapping arms would necessarily, in order to take their place, be nearer the traveling belt than the adjacent sizing rollers, and consequently, the axis of this telescopic cylinder would not be in the same line or approximately in the same line as the adjacent rollers.

Mr. LYON.—That is all.

Redirect Examination.

(By Mr. ACKER.)

Q. 293. On cross-examination you were asked what the effect would be in operation if you constructed a device of a series of end-to-end rollers and every alternate roller cut out of action so far as performing the function of rotation is concerned; and

(Deposition of Edward S. Cobb.)

I would ask whether there is any disclosure in the patent in suit of any such constructed device?

A. There is not.

Mr. LYON.—Wait a minute. Objected to as leading, incompetent, not the best evidence. The patent speaks for itself.

Q. 294. (By Mr. ACKER.) Please examine the model of the California sizer and state what the end-to-end rollers appearing in that model comprise or compose? [526]

A. The end-to-end rollers are made up as to represent three cylinders of different diameter located concentrically with one another and end-to-end.

Q. 295. Well, and what do they compose in the grader, in the sizer?

A. They compose the grading members, sizing members, one of the sizing members lying parallel to a grooved guide.

Q. 296. Is it a stationary sizing member composed of end-to-end rollers or is it a rotating member?

A. It is a rotating member, rotating sizing member placed parallel to a fixed member having a groove in which a rope travels.

Q. 297. And what do the end-to-end rollers of the patent in suit comprise?

A. They comprise a straight cylinder of equal diameter throughout its length.

Q. 298. What does the grooved member in the California sizer opposing the outer end-to-end member form in the sizer?

A. The grooved member forms a partition between

(Deposition of Edward S. Cobb.)

two fruit runs and acts as a support for the traveling member, acting as one element of the sizing mechanism.

Q. 299. What function does the rope of the model working in that grooved member perform?

A. It serves as one member of a sizing mechanism and as a carrier to propel the fruit along the runway.

Q. 300. Are the same functions performed by the grooved guide and the rope member of the patent in suit as those which you have attributed to the corresponding members in the model?

Mr. LYON.—Objected to as leading. [527]

A. Yes, sir.

Q. 301. (By Mr. ACKER.) Examining the model of the Parker device, directing your attention to the groove appearing at the apex of the double inclined wall surface, what is the function in the operation of grading of the member which travels within that longitudinal groove or seat or socket or whatever you please to term it?

A. It has nothing to do with the grading.

Q. 302. In what plane are the end-to-end rollers of the patent in suit adjusted relative to the longitudinally traveling member, using the patent for the purpose of answering the question? (Hands patent to witness.)

A. They are just in a horizontal plane passing through the traveling member.

Q. 303. How are the roll members of the sizing units in the Parker device adjusted—in what plane

(Deposition of Edward S. Cobb.)

relative to the traveling member?

A. They are adjusted in a plane making nearly a right angle with the traveling mechanism.

Q. 304. Directing your attention to the subject matter contained between lines 95 of page 1 of the printed specifications and lines 3, page 2, of the printed specification, I will ask you to read the same and state what is disclosed thereby.

A. It is there disclosed that the ropes carry the fruit toward the lower end of the machine and at the same time the grade rollers are revolving so as to keep the fruit from sticking in the run-way, thereby avoiding any tendency to crush the most delicate fruit.

Q. 305. If you remove the overlapping adjustable fingers [528] existing between the grade units or size units of the Parker device and substituted for the same a fixed roll, would you have a device capable of performing the functions which are carried out in the Parker device?

Mr. LYON.—Objected to as leading.

A. I think you would, because the carrying member of the Parker device presents a large flat surface and it would be operative.

Q. 306. (By Mr. ACKER.) What is the function of the overlapping adjustable fingers between the grade or sizing units of the Parker device?

A. To form a side or guide to a fruit conveyor.

Q. 307. What is the purpose of having them overlap with a slidable plane permitted to them?

A. So that they can be adjusted in length as the

(Deposition of Edward S. Cobb.)

distances between the sizing mechanism is *change*.

Q. 308. In your direct examination you stated that the California sizer as represented by the model exhibit disclosed a device identical with that disclosed by the patent in suit. Under cross-examination your attention was directed to certain differences and you were asked whether or not, in stating on direct examination the devices were identical, you had those differences in mind. In order to clear the record, I would ask you to explain more fully what you meant by your answer.

A. In the California grader each roll of the series is made with three steps or portions that are made of different diameter from the remainder, and in the patent in suit the rollers are all the same diameter throughout their length. I meant when I said they operated the same, that a portion of [529] roll in the California grader of a uniform diameter operated the same that the roller in the patent in suit does having a uniform diameter.

Q. 309. Does the chain or belt or whatever it may be, traveling in the groove in the apex of the double inclined surface of the Parker device perform the same function as the rope traveling in the groove guide member of the patent in suit?

Mr. LYON.—Objected to as leading.

A. It does.

Mr. ACKER.—That is all.

Mr. LYON.—That is all.

Mr. ACKER.—We will rest.

Mr. LYON.—Do you rest your case?

Mr. ACKER.—Yes.

Mr. LYON.—Complainant offers in evidence the sketch made by the witness Cobb, and ask that it be marked “Exhibit Sketch by Edw. S. Cobb.”

(Sketch is marked “Complainant’s Exhibit Sketch by Edw. S. Cobb.”) [530]

* * * * *

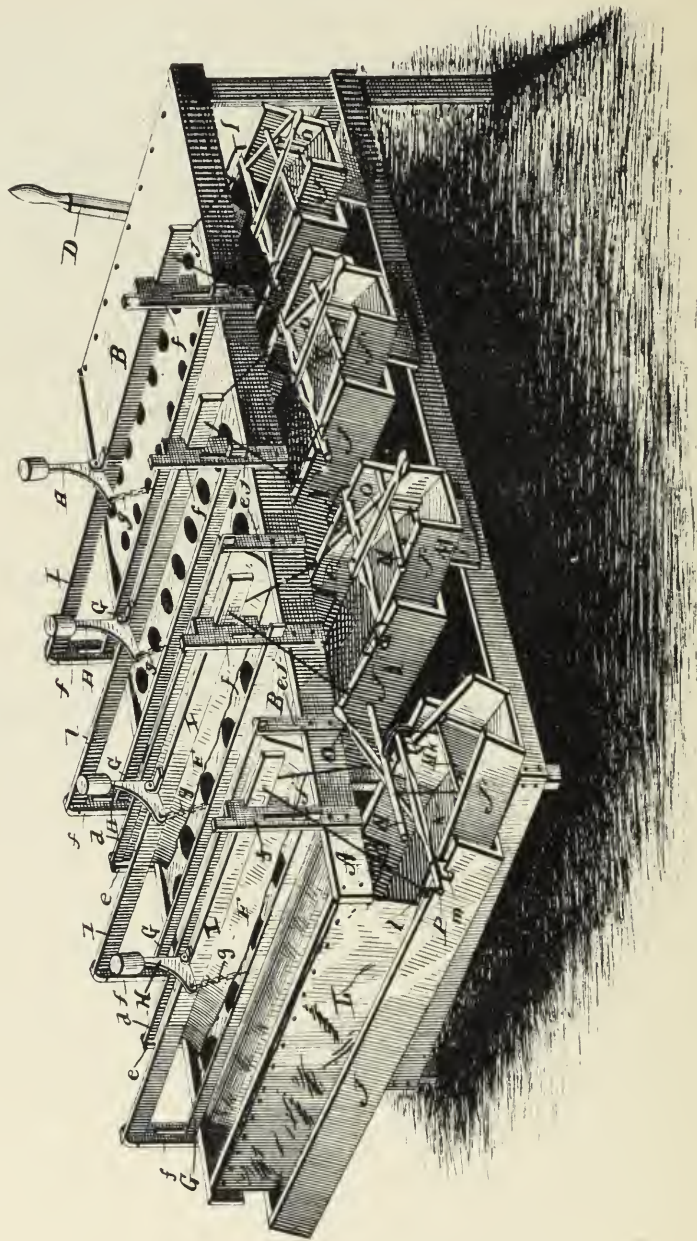
[Defendants' Exhibit "Ellithorpe Patent."]

F. N. ELLITHORPE.
FRUIT ASSORTER.

No. 399,509.

Patented Mar. 12, 1889.

Fig. 1.



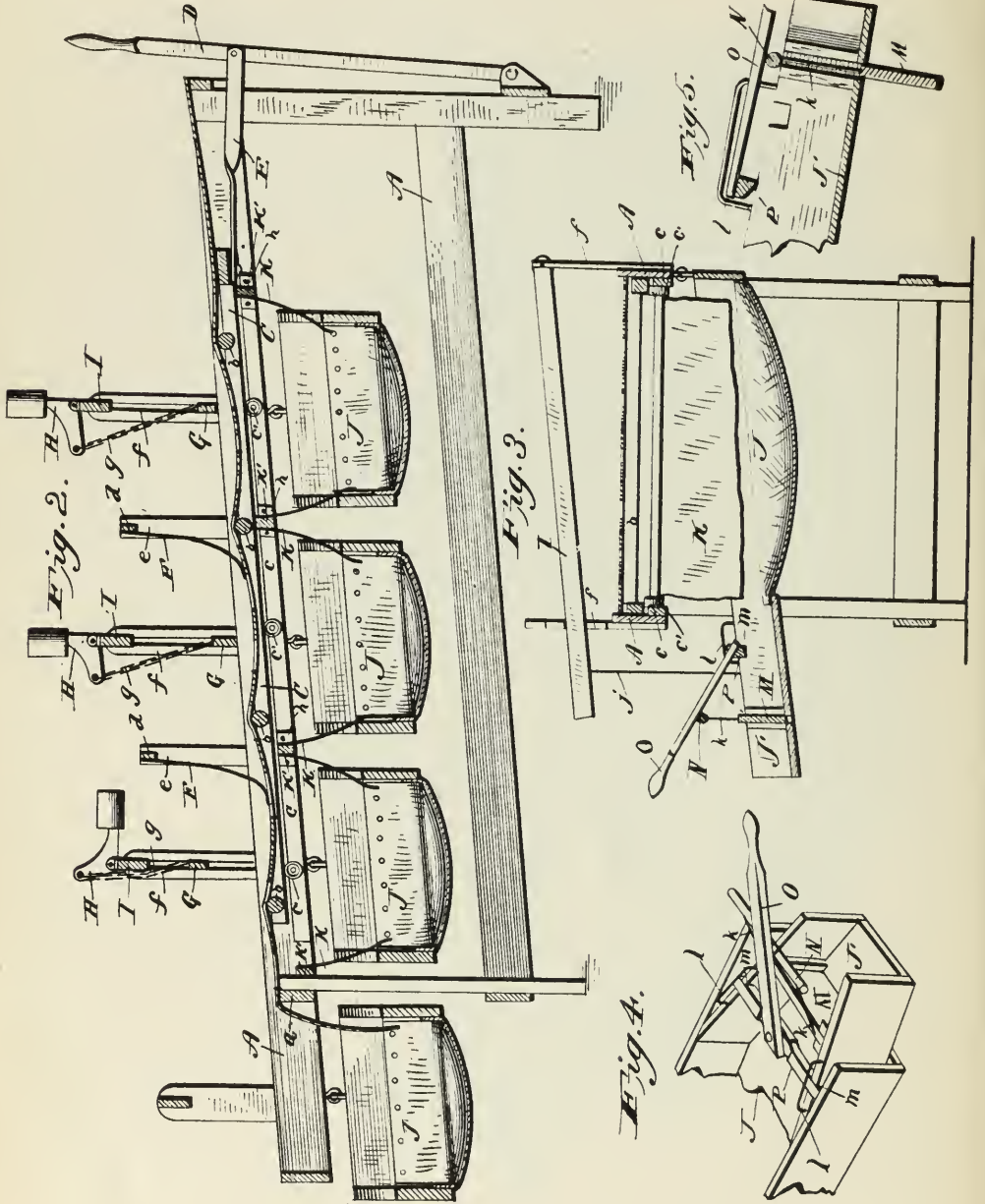
WITNESSES,
Geo. S. Finch
C. H. Lewis

INVENTOR,
F. N. Ellithorpe
 By *C. M. Alexander*
 Attorney

F. N. ELLITHORPE.
FRUIT ASSORTER.

No. 399,509.

Patented Mar. 12, 1889.



WITNESSES:
Wm. S. Kinch
C. H. Davis

INVENTOR,
F. N. Ellithorpe
By C. Alexander
 Attorney.

UNITED STATES PATENT OFFICE.

FRANK N. ELLITHORPE, OF PORT CLINTON, OHIO.

FRUIT-ASSORTER.

SPECIFICATION forming part of Letters Patent No. 399,509, dated March 12, 1889.

Application filed October 11, 1888. Serial No. 287,785. (No model.)

To all whom it may concern:

Be it known that I, FRANK N. ELLITHORPE, a citizen of the United States, residing at Port Clinton, in the county of Ottawa and State of Ohio, have invented certain new and useful Improvements in Fruit-Assorters, of which the following is a specification, reference being had therein to the accompanying drawings, in which—

Figure 1 represents a perspective view of my improved assorting-machine complete; Fig. 2, a longitudinal vertical sectional view of the machine; Fig. 3, a transverse sectional view of the same; Fig. 4, a detail view showing construction of spout cut-off or gate; and Fig. 5, a detail sectional view of the spout, the gate being shown open.

The invention has mainly for its object the production of practical, durable, and inexpensive apparatus that will rapidly and effectually assort the fruit—such as apples, pears, peaches, quinces, &c.—and conduct the several different sizes to their respective baskets or other receptacles without in the least injuring or bruising it, as will be more fully hereinafter set forth.

The invention consists in certain novel features of construction and arrangement of parts, that will be fully hereinafter set forth, and particularly pointed out in the claims.

Referring to the annexed drawings by letters, A designates a suitable inclined rectangular frame or table suitably supported and braced. Secured to the forward or front end of this frame, and reaching almost to the rear end thereof, is a loose flexible inclined diaphragm, B, which fits freely between the side rails of the frame. The only point of connection this diaphragm has with the frame is at its forward end, the rear end of the diaphragm hanging down over the cross-bar *a* at or near the rear end of the machine. This flexible diaphragm, which is made of canvas, leather, rubber, or other suitable material, is provided with several series of transverse rows of circular holes for the passage of the fruit, each series of rows of apertures, beginning at the top or forward end, being slightly larger in diameter than the preceding series, whereby the smallest fruit will drop through the first series of apertures, the next size through the next series, and so on down the

diaphragm, the largest fruit falling over the lower or rear end of the same. Any number of these series of separating-apertures may be formed in the diaphragm, as is evident.

Arranged directly beneath the diaphragm, so as to support the same, is a reciprocating agitating-frame, C, which is provided with transverse rollers or slides *b* and rests and works upon ways *c*, secured upon the inner sides of the side rails of the frame. These ways may or may not be provided with anti-friction rollers *c'* on their upper surface, as may be desired. This agitating-frame is reciprocated by means of a lever, D, pivoted on the forward end of the main frame and connected to the agitator-frame by means of a link or bar, E. When this frame C is reciprocated, it serves to agitate the fruit on the diaphragm and keep it in continuous motion and prevent it lodging in and stopping up the apertures, as is obvious.

Placed at suitable points along the diaphragm are depending retarders *F*, which consist of a suitable piece of canvas or other flexible material secured to a transverse bar or rod, *d*, removably supported in notched standards *e*, secured to the side of the stationary frame. The lower edge of the flexible material rests loosely upon the upper surface of the diaphragm. The object of these retarders is to prevent the fruit from rolling too rapidly down the inclined surface of the diaphragm. One or more of these retarders may be employed, as the exigencies of the case may require, as they are easily removable from the standards.

Vertically-movable transverse bars *G* are arranged at suitable points along the table or frame for temporarily stopping the fruit at any point during its passage down the diaphragm, for the purpose of removing the decayed or bad fruit before it passes through the diaphragm. These bars may be guided vertically in any suitable manner, in this instance their ends working in vertical slots in suitable standard, *f*, erected on the frame A. These bars *G* are held up out of the way by means of weighted angle-levers *H*, pivoted upon transverse levers or bars *I*, and connected to the said bars *G* by means of chains *g*. One or more of these bars *G* may be employed. Suitably hung below each series of

transverse holes is an inclined receiving-trough, J, provided with a canvas or other flexible bottom, and a spout, J', at its lower end. Depending from the frame A, and arranged transversely of the machine under the agitator, are suitable flexible separators, K, which direct the fruit without bruising it into the respective troughs J. These flexible separators are secured to removable transverse rods K', resting in notched blocks h on the frame A or ways c. The spout or lower end of these troughs may be elevated, if desired, by means of the levers I, pivoted to one of the standards f, and connected to the trough by means of the wire connections j. One of each pair of said standards f is notched for the reception of the free end of the lever to hold the trough in an elevated position. When baskets or other receptacles are placed under the spouts J', the lever may be disengaged from the notched standard and the trough or spout allowed to rest upon the top of the basket. The upper ends of the troughs are pivotally connected to the frame A by any suitable means—in this instance eyebolts being employed.

A trough is arranged beneath the exit end of the machine, to receive the fruit that does not pass through the holes in the diaphragm. A depending piece of canvas or other suitable material, L, is attached to the rear end of the frame, to direct the fruit into the last trough.

Adapted to close the spouts J' are the vertically-working gates M, working in transverse slots in the bottoms of the troughs and between suitable cleats or ways on the inner converging sides of the spouts. These gates are operated by any suitable means, but preferably in the manner shown in Figs. 3 and 4. Connected to the upper edges of the gates M by means of links or rods k k are transverse rods N, the ends of which rest upon the upper edges of the troughs when the gates are open, as shown in Fig. 5. Secured rigidly to these rods N are the operating hand-levers O, the ends of which are also secured rigidly to transverse rectangular bars P, resting upon the upper edges of the troughs and confined thereon by means of the confining-staples l, secured in the upper edges of the troughs or spouts. Square notches m are formed in the upper edges of the troughs or spouts for the reception of the ends of the bars P. When the gates are raised, as shown in Figs. 3 and 4, and the rectangular bars P dropped into the

notches m, they will be held in such elevated (or closed) positions, the said rectangular bars being prevented from turning by the rectangular apertures. When the bars P are lifted out of the notches m, the gates fall (or open) automatically to the position shown in Fig. 5.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a fruit-assorter, the combination of a frame, an inclined loose flexible perforated separating-diaphragm connected at its upper end to the said frame, and an agitating device arranged beneath the said loose diaphragm.

2. In a fruit-assorter, the combination of a supporting-frame, a loose flexible perforated diaphragm connected to the frame, an agitating-frame arranged below and adapted to support this diaphragm, and means for giving this agitating-frame a longitudinal movement under the diaphragm, substantially as described.

3. In a fruit-assorter, the combination of a frame, a flexible inclined perforated diaphragm, and a transverse depending retarder, F, this retarder being constructed of flexible material, and having its lower edge resting upon the said flexible diaphragm, substantially as and for the purpose set forth.

4. The combination, with the inclined flexible diaphragm provided with different-sized holes, of a reciprocating agitating-frame arranged beneath and adapted to support the said diaphragm and provided with transverse rollers.

5. The combination of a frame, a perforated diaphragm, a support above this diaphragm, a vertically-guided stop-bar, G, a pivoted weighted angle-lever upon the said support, and a chain connecting the angle-lever and stop-bar, substantially as and for the purpose set forth.

6. The combination of a trough, a spout attached thereto and provided with the notches m, a vertically-movable gate, the transverse bars connected together by means of the hand-lever and to the gate by suitable connecting-rods, and the confining staples or loops secured over the notches m, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

FRANK N. ELLITHORPE.

Witnesses:
LEON NEWTON,
MILES NEWTON.

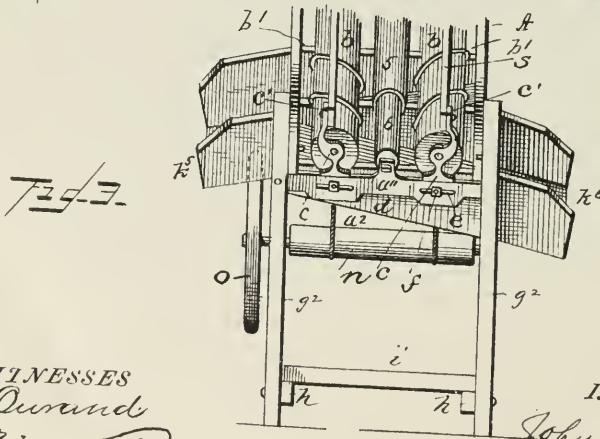
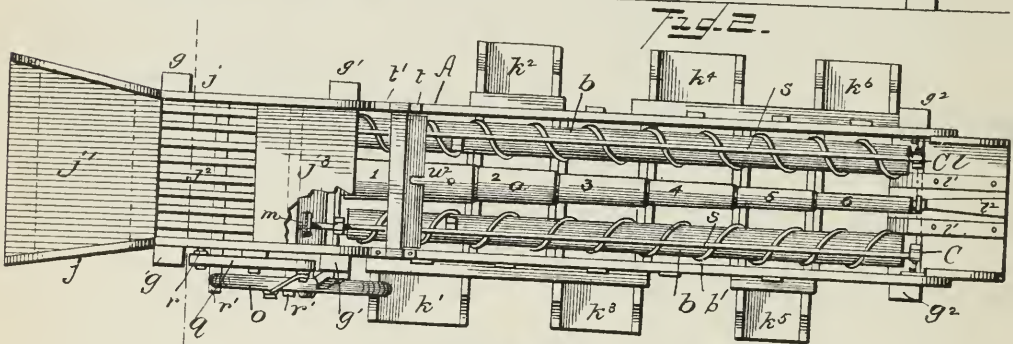
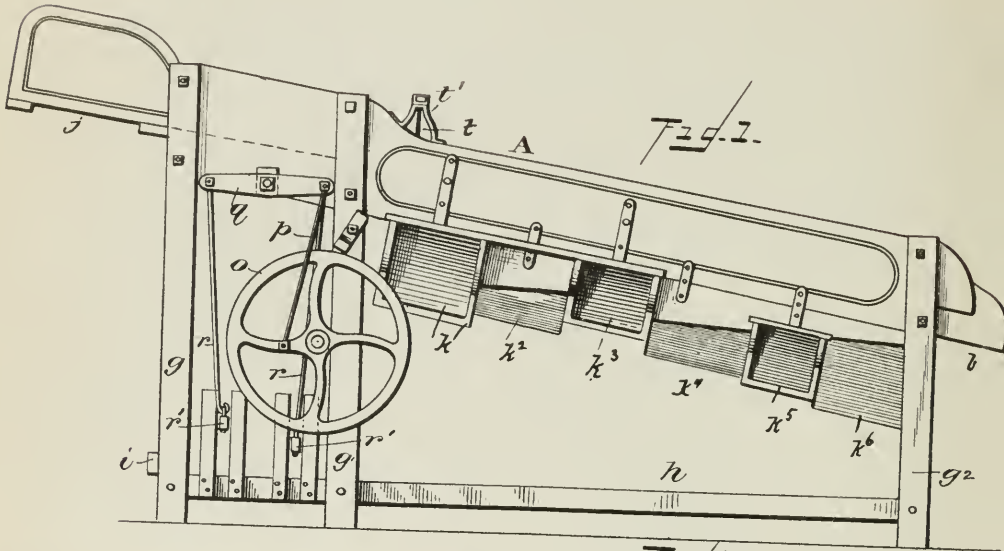
[Defendants' Exhibit "Jones Patent."]

J. A. JONES.

MACHINE FOR ASSORTING OR SIZING FRUIT.

No. 430,031.

Patented June 10, 1890.



WITNESSES
F. L. Curand
E. A. Finkel

INVENTOR
John A. Jones
 by *W. H. Finkel*
 his Attorney.

J. A. JONES.

MACHINE FOR ASSORTING OR SIZING FRUIT.

No. 430,031.

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Fig. 4

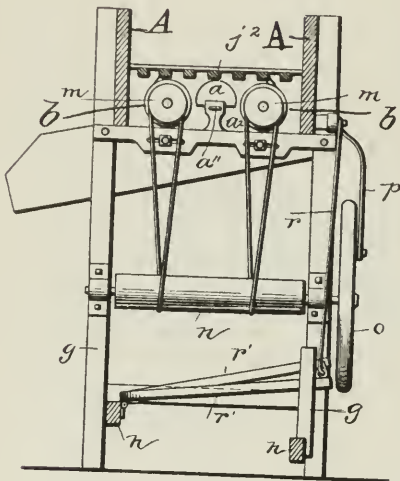


Fig. 5

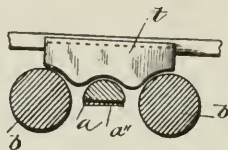


Fig. 6

Fig. 6²

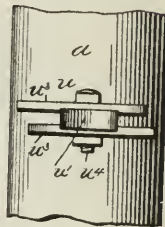
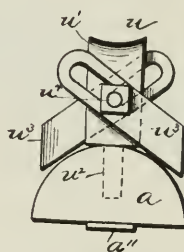


Fig. 8

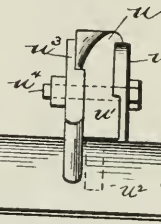
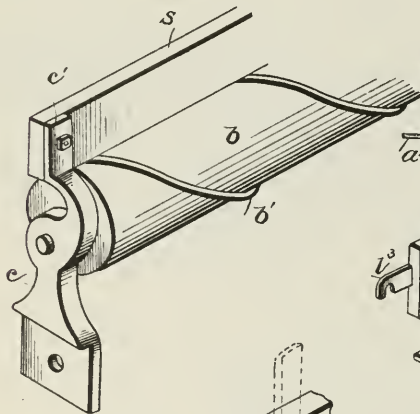


Fig. 7

Fig. 9

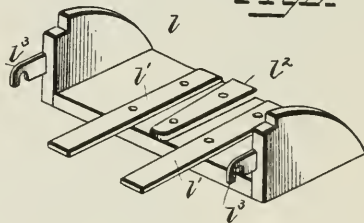


Fig. 10

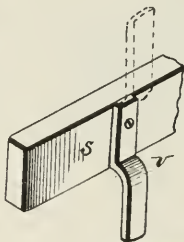
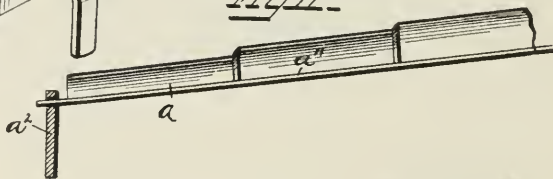


Fig. 11



WITNESSES
F. L. Curand
E. A. Sincel

INVENTOR
John A. Jones
 by *Wm. S. Sincel*
 his Attorney.

J. A. JONES.

MACHINE FOR ASSORTING OR SIZING FRUIT.

No. 430,031.

Patented June 10, 1890.

Fig 12.

Fig 13.

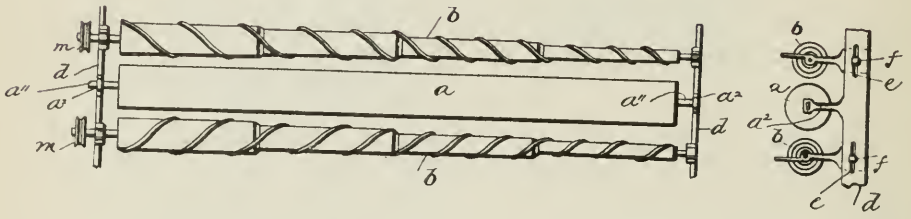


Fig 14.

Fig 15.

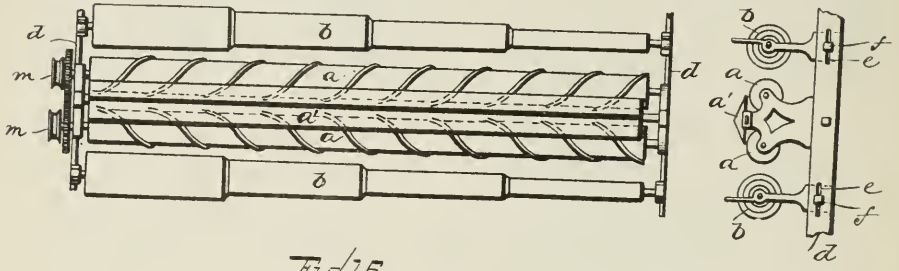


Fig 16.

Fig 17.

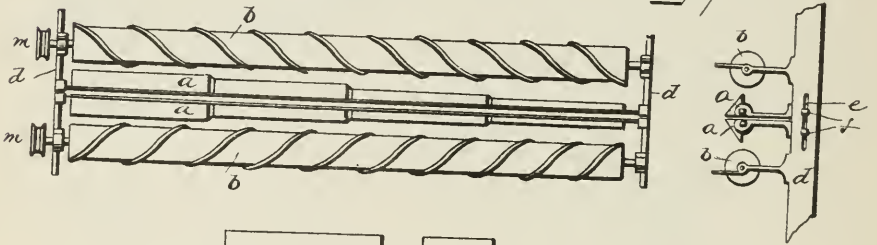
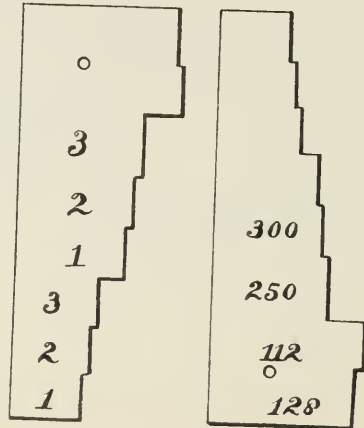


Fig 18.



WITNESSES
F. L. Ouraud,
E. A. Gincel.

INVENTOR
John A. Jones
by J. H. G. G.
his Attorney.

UNITED STATES PATENT OFFICE.

JOHN A. JONES, OF YORK, PENNSYLVANIA.

MACHINE FOR ASSORTING OR SIZING FRUIT.

SPECIFICATION forming part of Letters Patent No. 430,031, dated June 10, 1890.

Application filed February 16, 1889. Serial No. 300,137. (No model.)

To all whom it may concern:

Be it known that I, JOHN A. JONES, a citizen of the United States, residing at York, in the county of York and State of Pennsylvania, have invented a certain new and useful Improvement in Machines for Assorting or Sizing fruit, of which the following is a full, clear, and exact description.

This invention relates to machinery for separating fruits and vegetables into sizes or grades in accordance with commercial usage or the packer's requirements.

Inasmuch as the invention is in the nature of an improvement upon previous machines having a like general object in view, I will first describe it, and then particularly point out and claim the part or parts constituting my invention.

In the accompanying drawings, illustrating my invention, in the several figures of which like parts are similarly designated, Figure 1 is a side elevation; Fig. 2, a top view; Fig. 3, a delivery end elevation, the feed end being broken away. Fig. 4 is a feed end elevation. Fig. 5 is a section showing the restraining-apron. Fig. 6 is an enlarged front elevation of the lemon-turner. Fig. 6^a is a plan view, and Fig. 7 a similar side elevation, of the same. Fig. 8 is an enlarged perspective view of a side piece in part, its bearing or box, and restraining-board. Fig. 9 is a perspective view of the end delivery spout; Fig. 10, a perspective view of the auxiliary lemon-turner in working position on the restraining-board. Fig. 11 is a side view of the center piece. Fig. 12 is a top view, and Fig. 13 an end view, of another arrangement of parts; Figs. 14 and 15, similar views of still another arrangement, and Figs. 16 and 17 similar views of still another arrangement. Fig. 18 shows in obverse and reverse a gage used in setting the machine.

The fundamental parts of my machine are a graduated member of one or more parts, stationary or movable in operation, and a straight-edge member of contrary operation relatively to the other member, and one or the other of these members adjustable laterally with relation to the other to vary the distances between them. One example will suffice to illustrate the meaning of this state-

ment of fundamental construction, although I have shown and will describe several.

A center piece *a* has a series of sections 1 to 6, (more or less,) of different cross-sectional area, decreasing in size from the feed to the delivery end of the machine. This center piece is fixed or stationary, and forms one member of the machine, in accordance with the foregoing statement. Rollers *b* are arranged on each side of the center piece, with their surfaces parallel to the central longitudinal plane of the center piece, and said rollers are truly cylindrical; and inasmuch as the parts *b* may be stationary or rotary and of various shapes, as will presently appear, I designate them by the generic term "side pieces," and they constitute the second member of the machine, conformably with the foregoing statement. One or the other of these members *ab* is adjustable laterally and bodily toward and from the other. In the machine shown in Figs. 1 to 4 the cylinders *b* are shown as adjustable, having to this end bearings at each end in boxes *cc*, which are supported upon cross-bars *d*, the bearings and cross-bars being connected by means of slots *e* and bolts *f*. Thus not only are the spaces between the center piece and the cylinders graded and varied by the gradations of the center piece, but they may be further varied by moving the cylinders toward or from the center piece. The relations of these two members may be varied. In Fig. 12 the center piece is a cylinder, while the side pieces are rollers having sections of decreasing diameter and made adjustable, as in the first case. In Fig. 14 the center piece is composed of two cylindrical rollers geared together, so as to revolve toward each other, and surmounted by a triangular strip *a'* to cover the space between the said rollers. The side pieces are graduated, as in Fig. 12, are non-rotative, and are adjustable. In Fig. 16 the side pieces are cylindrical, rotary, and non-adjustable, while the center piece is composed of two quarter-sections graduated and each supported in its own bearings and made adjustable relatively to the side pieces. Moreover, it is obvious that in Fig. 14 the center pieces might be graduated and the side pieces be truly cylindrical. So, also, in Fig. 16 the center piece might be

straight and the side pieces graduated. The center pieces in Fig. 16 might be quarters of a cylinder or a square or other shape, or they might be cylinders, straight or graduated, rotary or stationary, and adjustable or non-adjustable; but in the last case the side pieces should be adjustable.

I have stated thus the principle of my invention, and I will now describe the details as illustrated in the drawings.

A suitable frame is constructed of uprights g g' g'' , stringers h , cross-pieces i , and supports for the cross-bars d , on which the center piece and side pieces are arranged. A trough A is supported in an inclined position upon this frame, and this trough contains in its delivery portion the center piece and side pieces. The upper portion of the trough is provided with a hopper j , having a flexible bottom j' , a screen j'' , and a feed-table j''' , substantially as and for the respective purposes mentioned in my Patent, No. 150,961. Delivery-spouts k k^2 k^3 k^4 k^5 k^6 depend at inclines in alternation from opposite sides of the trough and correspond in number with the number of sections into which the center piece (or side pieces) may be divided. The end of the trough is provided with a spout l .

It hardly need be said that the center piece and side pieces serve to separate the fruit into as many sizes as there are sections and spouts and that the smallest fruit escapes at section 1 and spout k' , while the largest goes over the ends of these center and side pieces out at the spout l .

The spouts k' to k^6 will have bottoms of flexible or soft material, (preferably canvas or rubber,) which will preserve the descending fruit or vegetables from injurious impact.

The rotary member or members may be provided with pulleys m , banded to a drum n . This drum may have a fly-wheel o , which is connected by a pitman p with a rock-lever q , supported on the frame or trough, and this rock-lever is connected by rods r r' with treadles r'' r''' , whereby the drum may be rotated, and thus transmit motion to the side pieces or center pieces, whichever may be rotary.

Above the side pieces are arranged the boards s , which are secured to brackets c' , rising from the boxes c . These boards restrain the fruit, &c., from escaping over the sides.

An apron t is suspended over the members a and b , just next the feed-tables j'' , to restrain the too free movement of the incoming fruit and let it down gently to the center piece and side pieces, and also to give the operator time to gather and throw out specked stuff. This apron may be made of rubber or other flexible material, and is preferably suspended from a bracket l' , mounted upon the trough.

The spout l (see details, Fig. 9) is made with the tongues l'' l''' to project under the spaces at the ends of the side pieces, so as to prevent the fruit from dropping on and being injured by the edge of the spout and against

the cross-piece as it leaves the side pieces. A ridge l^2 may also be employed in the spout to keep separate the two outgoing streams of fruit. The spout may have hooks l^3 to engage the trough.

The rotary member is provided with a spiral strip of rubber or other flexible substance or material b' to assist gravity in the descending motion of the fruit.

The center piece is preferably made of wood, and in order to keep it straight, prevent it from warping, and at the same time afford supports for it, I affix to it longitudinally a strip, preferably of flat steel, a'' , which projects beyond the ends of the center piece and engages lugs a^2 , rising from or affixed to the cross-pieces d d' .

In assorting lemons those of elongated or egg shape are apt to go into the machine crosswise of the center piece and side pieces, and in order to turn them lengthwise I provide the device u , Figs. 6 and 7, which consists of a post u' , having a foot which is set in a socket u^2 in the center piece. The post is grooved obliquely in opposite directions on opposite sides, and in these grooves are arranged fingers u^3 u^3 , which are slotted longitudinally and held together and to the post by a bolt u^4 . The fingers are made adjustable upon the post so as to project more or less beyond the center piece, in order to suit the size of lemons being acted upon. In use this lemon-turner is set in the socket in the center piece, so that its fingers project over the sides of the center piece and into the spaces between it and the side pieces and serve to turn the lemons lengthwise to be fed to the proper egress. When oranges or other round objects are being assorted, this lemon-turner is arranged in the center piece with its fingers extending lengthwise instead of crosswise of the center piece and prevents the objects from riding over one another and directs them into the spaces between the center piece and side pieces, so as to be properly fed along.

v is the auxiliary lemon-feeder; and it consists of a bayonet-shaped device fastened to the restraining-boards, and when not in use it is turned up, as indicated in dotted lines in Fig. 10. The action of this form of lemon-turner is the same as that just described.

In order to properly adjust the side pieces or center pieces, I employ a gage. (Shown in Fig. 18.) This gage consists of a piece of board or other rigid material having a series of steps made in conformity to the sizes into which the fruit is desired to be assorted. For the sake of clearness I will describe my gage as used in assorting oranges. Oranges are assorted or graded according to the number that may be packed in a box, and are designated as follows, beginning with the largest and going down to the smallest that are put upon the market, viz: 96's, 112's, 128's, 146's, 176's, 200's, 226's, 250's, and 300's; but for practical purposes with my machine consideration may be given only to the 96's, 112's, 128's,

250's, and 300's. Those oranges that would escape at section 1 and spout *k'* would be the smallest, while the largest would run out at the end of section 6 and spout *l*, and sometimes the 96's and 112's are mixed.

The adjustable members are adjusted alike at both ends, and it is the object of this gage to insure such adjustment. Of course if the adjustment at each end is fixed, then a corresponding increase or diminution of width of spaces follows throughout the machine. The upper or feed ends of the movable members are set by the larger numbers on the gage, while the lower ends are set by the smaller numbers on the gage. This setting of the movable members is effected by introducing the gage edgewise between the movable members and then moving up the bearings of said movable members until they come in contact with the gage and then tightening the bolts used to secure such bearings or boxes firmly to the cross-bars *d*. For example, if 112's are to be discharged at spout *k'*, then the gage will be introduced at No. 112, between the movable members at section 6 of the center piece. The smaller sizes would then be determined by gaging the upper ends of the movable members by sections marked 250 and 300 on the gage. Sections marked 1 2 3 and 1 2 3 on the gage are used in setting the rollers for other fruit smaller than oranges, the narrow 1 2 3 for the upper ends and wide 1 2 3 at the lower ends of rollers.

My machine may be used for assorting round varieties of tomatoes, and also for assorting apricots, olives, and other fruits and vegetables having an approximately regular outline; but it is especially effective in assorting oranges according to already well-known standards. For assorting oranges it is immaterial whether the center piece or side pieces be adjustable or not, and I include in my invention as claimed a machine so constructed.

The strip *b'* may be omitted, and in such case the center piece and side pieces would have rather more fall than is indicated in the drawings.

In Fig. 14 the coupled rollers might be graduated and the side rollers straight.

It is to be observed that the several sections of the graduated member have parallel instead of tapering edges, and therefore said sections, in conjunction with the straight-edge members, form rectangular egress-spaces, whereby there is no liability of the objects being assorted being crowded and wedged into a space too small for them. In practice it is found that a tapering edge exit tends to attract objects that are too large to freely pass, and that such objects being forced through these exits are injured or bruised, and thus their prime condition is destroyed and their market value impaired. With my machine, having rectangular openings or exits, this injury is impossible.

Special advantages growing out of placing

the two members in such relation to each other that their working faces or edges would be in precisely the same horizontal plane are that the curved faces of these members flare upwardly and away from the plane from which the fruit escapes or in which it is discharged from the machine, thus enabling gravity alone or assisted by the rubber spiral, when that is used, to effect the discharge of the fruit without other means, such as a movable member. Such second movable member is dispensed with and the motive power required to run the machine to this extent is diminished and the cost of construction correspondingly decreased. Moreover, if the working faces or edges be in the same plane, and one or both of the members be cylindrical, fruit that is the least particle too large to escape at a given exit cannot possibly lodge in such exit, but must go on to its own exit; whereas, if the said working-faces were disposed one below the other there would be below the horizontal or horizontal axial plane of the roller a space greater than the exit, into which the fruit would tend to lodge and from which it could be dislodged only by force and at the risk of injury to its skin and substance, and hence in all other machines to me known, the working members have been made to revolve in opposite directions, or one has a rotary motion on its longitudinal axis and the other a longitudinal bodily movement at right angles to the direction of rotation of the other member, so as to force-feed the fruit and, as stated, at the imminent risk of injuring delicate fruit.

What I claim is—

1. A machine for assorting oranges and the like, comprising a graduated member composed of a number of sections and each section of uniform width throughout its length, and a straight-edge member, one of these members being rotary and the other stationary and one of them being adjustable laterally with relation to the other to vary the distances between them, and the two members forming a series of rectangular exits of different sizes, substantially as set forth.

2. A machine for assorting oranges and the like, comprising a graduated member composed of a number of sections and each section of uniform width throughout its length, and a straight-edge member arranged in the same horizontal plane, the two members forming a series of rectangular exits of different sizes, and one of said members having a rotary motion and the other being stationary and having boxes or bearings suitably supported and adjustable to permit the movement of that member away from or toward the other member to vary the space or spaces between the members, substantially as described.

3. In a machine for assorting oranges and other fruits and vegetables, a center piece provided with a number of sections of different width and each section of uniform width

throughout its length, cylindrical side pieces arranged substantially parallel with the central plane of the center piece and in the same horizontal plane and provided with boxes and supports for said boxes, and means, such as slots and bolts, for fixing said boxes at different points on the supports, the said center piece and side pieces forming a series of rectangular exits of different sizes, substantially as and for the purpose described.

4. In a machine for assorting oranges, &c., a fixed center piece provided with a series of sections of different width and each of uniform width throughout its length, combined with adjustable side pieces having straight edges and arranged upon opposite sides of the center piece and forming with the center piece a series of rectangular exits of different sizes, a trough in which the center piece and side pieces are arranged, spouts depending at an incline from the bottom of the trough corresponding in number with the number of sections in the center piece and arranged in alternation on opposite sides of the trough, and an end spout, substantially as and for the purpose described.

5. In a machine for assorting oranges, &c., a fixed center piece composed of a series of sections of different width and each section of uniform width throughout, substantially as shown, combined with side pieces having straight edges, adjustable boxes for said side pieces, and means to rotate the side pieces, substantially as described.

6. In a machine for assorting oranges, &c., the center piece provided with a graduated active face and a flat bottom, and a metal strip secured to such flat bottom and extending beyond both ends, combined with supports to receive the ends of the metal strips, substantially as described.

7. The within-described lemon-turner, the same consisting of a post and fingers crossed obliquely and adjustably secured to the post and adapted to be applied to a stationary member of a fruit-assorting machine and to co-operate with feeding mechanism in such machine to insure the passage of lemons in proper position through such machine, substantially as described.

8. In a machine for assorting fruit, the com-

bination of the center piece and the side pieces forming feeding and discharging means, restraining-boards arranged above said side pieces to prevent the escape of objects being acted upon, and fingers arranged, respectively, on the center piece and the restraining-boards to turn lemons from a crosswise into a longitudinal direction, substantially as described.

9. The bayonet-shaped piece *r*, adapted to be applied in a fruit-assorting machine having a stationary support therefor, and also having feeding devices to turn lemons and such like oblong fruit into proper position to be discharged, substantially as described.

10. In a machine for assorting oranges, &c., the combination, with the trough and assorting mechanism therein, of a detachable end spout *l*, constructed with projecting pieces *l'*, substantially as and for the purpose described.

11. In a machine for assorting oranges, &c., a fixed center piece provided with a series of sections of different width and each of uniform width throughout its length, combined with side pieces having straight edges and arranged upon opposite sides of the center piece and forming with the center piece a series of rectangular exits of different sizes, a trough in which the center piece and side pieces are arranged, spouts depending at an incline from the bottom of the trough corresponding in number with the number of sections in the center piece and arranged in alternation on opposite sides of the trough, and an end spout, substantially as and for the purpose described.

12. A machine for assorting oranges, comprising a graduated member and a straight-edge member, one or the other of such members being rotary and the other stationary and all arranged in the same horizontal plane and forming a series of exits of different width and rectangular in outline, substantially as described.

In testimony whereof I have hereunto set my hand this 14th day of February, A. D. 1889.

JOHN A. JONES.

Witnesses:

J. JESSOP,

WALTER B. WHITE.

[Defendants' Exhibit "Jones Patent No. 2."]

UNITED STATES PATENT OFFICE.

JOHN A. JONES, OF YORK, PENNSYLVANIA.

MACHINE FOR ASSORTING AND SIZING FRUITS, &c.

SPECIFICATION forming part of Letters Patent No. 442,288, dated December 9, 1890.

Application filed June 24, 1890, Serial No. 356,542. (No model.)

To all whom it may concern:

Be it known that I, JOHN A. JONES, a citizen of the United States, residing at York, in the county of York and State of Pennsylvania, have invented a certain new and useful Improvement in Machines for Assorting and Sizing Fruits, &c., of which the following is a full, clear, and exact description.

"Sizing" fruit in the nomenclature of the horticulturist means to separate fruit into lots, all of the fruit in each lot being essentially of the same dimensions or size. In the same nomenclature "assorting" fruit means separating the fruit according to its quality or color or other distinguishing characteristics without reference especially to size or dimensions.

The present invention relates to a machine primarily designed for sizing fruit, and also to a machine in which both sizing and assorting may be accomplished.

The invention consists of a machine of the character described, in which the working members are constructed and arranged to operate in the manner and for the purpose hereinafter more particularly set forth and finally claimed.

In the accompanying drawings, illustrating my invention, in the several figures of which like parts are similarly designated, Figure 1 is a plan which illustrates both a sizing and an assorting machine. Fig. 2 is a sectional end view, and Fig. 3 is a perspective view, of a detachable assorting-board.

The hopper *a*, slatted leaf-separating portion *b*, working-compartment *c*, frame or trough *d*, treadles *e*, pitmen *e'*, by which said treadles are connected to opposite ends of a rocking lever *e²*, secured to the working-compartment, fly-wheel *f*, and connecting-rod *f'*, for connecting the rocking lever and fly-wheel, belt-drum *g*, belts *h*, and pulleys *i*, by which the belts are applied to the separating devices, may be of any approved construction. (See, for example, my patent, No. 430,031, dated June 10, 1890.)

In the machine that is designed solely for sizing I will employ a stationary member *k* and a rotary member *l*. These two members are provided with a series of graduations. The edge of each graduated section is straight and the adjacent edges of these graduated

members are parallel, so that the openings between the two members are rectangular. The stationary member may be cylindrical or semi-cylindrical or other section of a cylinder, or it may be angular. The rotary member, of course, is, of necessity, cylindrical. When but these two members are employed, the driving mechanism will be modified accordingly. The rotary member may be arranged in brackets *m* at opposite ends of the machine, and these brackets may be supported upon cross-bars *n*, slotted longitudinally, and the brackets adjustably secured to such slotted portions by means of a bolt and nut or other suitable fastening *o*, so that the said member may be adjusted bodily toward and from the member *k* to vary the sizes of the openings between these two members, all as in my patent, No. 430,031, referred to. Of course the member *k* may be made adjustable instead of the member *l*. As many spouts *p* will project from the bottom of the trough laterally as there are exits in the separating members.

In the machine shown in Fig. 1 there is a stationary center piece *k*, graduated as before, and two parallel correspondingly-graduated side pieces *l* and *l'*, arranged on opposite sides of this said center piece, and the discharge-spouts project from opposite sides of the trough. Beneath the center piece, as shown in Fig. 2, there is a vertical partition *q*, which separates the spouts of one side from those of the other. Such a machine is equally efficient as the one first described for sizing fruit. In order to render it capable of assorting as well as sizing, I arrange in the compartment *c* an assorting-board *r*, (shown in detail in Fig. 3 as consisting of portion *r'*) having at one end a socket *r²* to receive a screw or other fastening, whereby the said board may be attached in place in the compartment *c*, as indicated in Fig. 1. A movable portion *r³* is secured to the portion *r'*, preferably by a hinge *r⁴* of textile material, and the said portion *r³* is provided with screw-holes or other openings *r⁵*, by which the said portion may be secured to one or the other side of the trough. When this assorting-board *r* is arranged in the compartment *c*, as shown in Fig. 1, the feed may be into the portion *c'* of the compartment *c*, and the attendant standing by this com-

partment, in assorting oranges, say, will allow all the "brights" to pass between l and k , while he will pick out the "russets" and place them in the section c^2 , so that they may pass
 5 between the members k and l' . In this way the brights will all be discharged from one side of the machine and the russets from the other. A spout s may be attached to the side of the trough and have two divisions, one of
 10 which s' may serve to conduct away faulty fruit, while the other s^2 may serve to receive from the attendant "golden russets."

The compartment c may receive oblique boards l' on opposite sides to insure the fruit
 15 rolling down between the members k and l and k and l' .

The assorting-board is removable from the compartment c at pleasure when fruit is being separated that needs no assorting. This
 20 assorting-board is articulated, in order that the machine may be used for right or left hand overseeing.

What I claim is—

1. In a fruit sizing and assorting machine,
 25 suitable separating members, substantially such as set forth, a hopper, and an assorting-board arranged obliquely in the said hopper

and removable therefrom at pleasure, substantially as described.

2. An articulated assorting-board, combined with the separating devices and hopper of a fruit-sizing machine, substantially in the manner and for the purpose set forth.

3. A machine for sizing and assorting fruit, consisting of a stationary graduated member and a rotary graduated member arranged upon each side of the said stationary member, the said several members being graduated alike and the graduations forming a series of exits of different width and rectangular in outline, discharge-spouts leading from said exits, and a partition q , arranged beneath the stationary member and lengthwise thereof and separating the said discharge-spouts in the line of the stationary member, and thereby constituting a machine adapted to separate two different kinds or qualities of fruit, substantially as described.

In testimony whereof I have hereunto set my hand this 23d day of June, A. D. 1890.

JOHN A. JONES.

Witnesses:

J. JESSOP,

W. T. NELSON.

504

Fred Stebler vs.

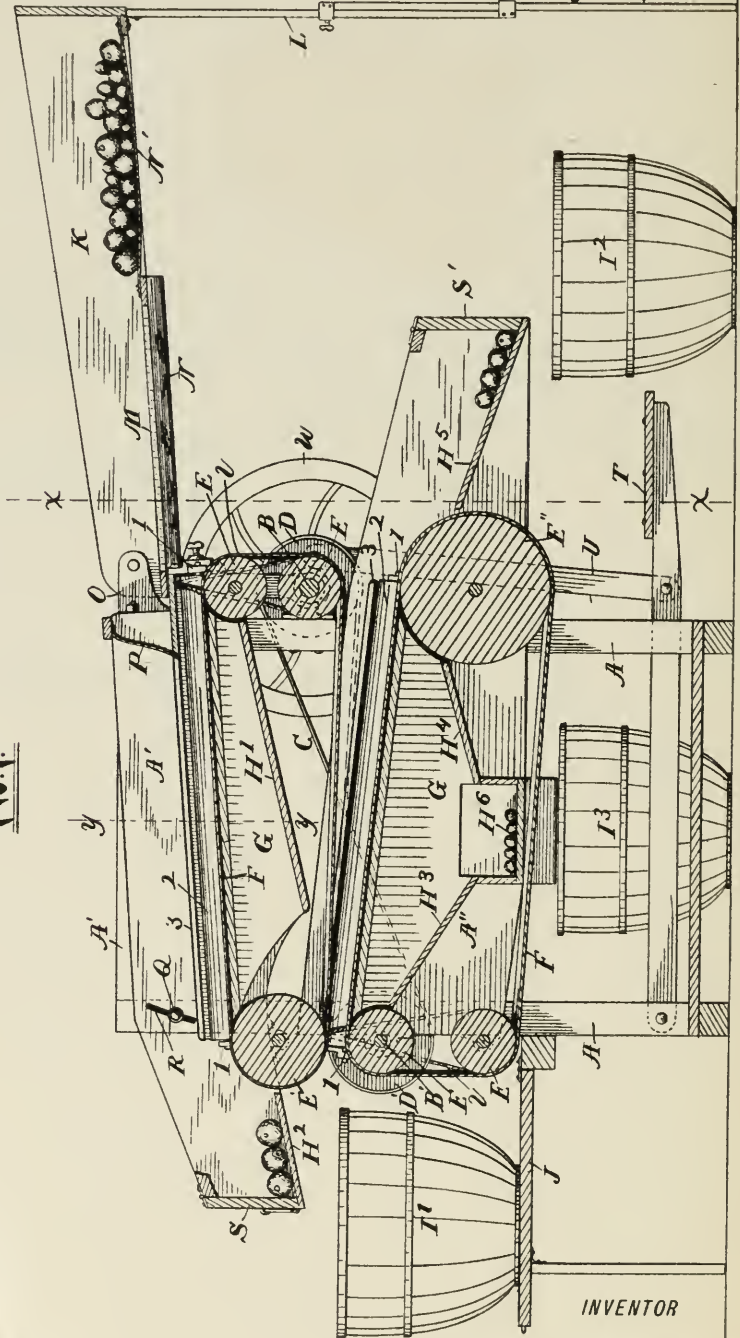
[Defendants' Exhibit "Hutchins Patent."]

H. H. HUTCHINS. ASSORTING MACHINE.

No. 456,092.

Patented July 14, 1891.

Fig. 1.



WITNESSES:

W. R. Buchanan
John C. Pierce.

INVENTOR

Henry H. Hutchins

BY

Moulton & Rogers
 ATTORNEYS

H. H. HUTCHINS. ASSORTING MACHINE.

No. 456,092.

Patented July 14, 1891.

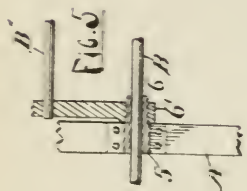


FIG. 5.

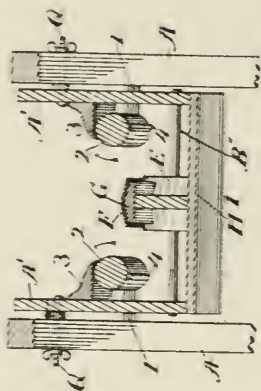
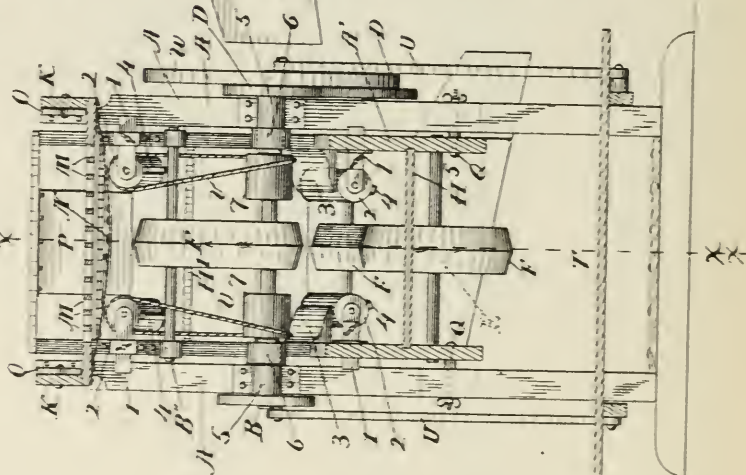


FIG. 3.

FIG. 2.



WITNESSES:

J. R. Buchanan
Julius O. Pierce.

INVENTOR

Henry H. Hutchins.

BY

Moulton & Rogers
 ATTORNEYS

UNITED STATES PATENT OFFICE.

HENRY H. HUTCHINS, OF GANGES, MICHIGAN.

ASSORTING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 456,092, dated July 14, 1891.

Application filed January 30, 1890. Serial No. 338,693. (No model.)

To all whom it may concern:

Be it known that I, HENRY H. HUTCHINS, a citizen of the United States, residing at Ganges, in the county of Allegan and State of Michigan, have invented certain new and useful Improvements in Assorting-Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to assorting-machines for fruit and vegetables; and it consists in the construction, combination, and arrangement of the various parts, as hereinafter described, and particularly pointed out in the claims, reference being had to the accompanying drawings, wherein—

Figure 1 is a longitudinal vertical sectional view on the line $x x x$ of Fig. 2; Fig. 2, a rear end elevation, partly in section, on the line $x x$ of Fig. 1; Fig. 3, a detail showing a vertical section of the upper system on the line $y y$ of Fig. 1; Fig. 4, a side elevation with the end of lower spout and door S' of Fig. 1 broken away; Fig. 5, a detail on line $z z$ of Fig. 4, showing the method of pivoting the systems to the frame.

Like letters and figures of reference indicate like parts throughout the drawings.

The essential features of this machine are two or more inclined casings pivoted and arranged in a suitable frame, having assorting devices arranged within the casings and provided with means of operating the assorting devices, driven by power applied in any suitable manner.

In the drawings, A represents the frame; $A' A''$, side boards of the upper and lower casings, respectively. Each casing and its mechanism constitute a separate assorting system, and each system is adapted to assorting a particular size of fruit; and in the device shown and illustrated the systems are arranged one above the other and operate in conjunction, as hereinafter fully explained. Each system is pivoted to the frame A upon the shaft which operates the assorting devices, respectively, said shafts being lettered $B B'$, which shafts are journaled in boxes 5, which are secured to frame A by bolts. Each

box 5 has an inwardly-projecting sleeve 6, Fig. 5, upon which the side boards are pivoted for vertically adjusting the opposite end and regulating the vertical adjustment of the various casings. The upper system is connected to its pivot B by a bracket, secured to the ends of the side boards, Fig. 4, while the lower system is provided with a box secured to the end of the side board A'' , corresponding to box 5, (without its sleeve 6,) which is not shown in the drawings, being a common device for this purpose and arranged behind the box 5 of the shaft B' , as shown in Fig. 4. This adjustment is provided for by the slot R in the side boards $A' A''$, in which slot is placed the binding-bolt Q, secured in the frame A. The two shafts $B B'$ are provided with pulleys $D D'$, connected by a crossed belt C. Each casing is provided with a bottom board upon which rests a T-shaped bridge G, arranged in the middle and extending from end to end of the bottom board. At the lower end of each casing are arranged large pulleys $E' E''$, and at the upper end of each casing are arranged small pulleys $E E E E$. The pulleys E on the shafts B and B' are driving-pulleys. The others are idle. Each system is provided with a series of three of said pulleys E, and each series is provided with a belt F, arranged to travel along the bridge G, for conducting the fruit along the casing. These two systems of pulleys and belts are driven by foot-power applied to a treadle T, pivoted to the frame and connected to the crank balance-wheel W by rod U. Upon the inside of the side boards $A' A''$, respectively, are arranged the rollers 2, provided with a longitudinal flange or rib 4. Said rolls are journaled in horizontally-adjustable hangers 1, secured to the end of the side boards, and are rotated from the driving-shafts by suitable pulleys and belts. (See 7 V in Fig. 2 for illustration of method of rotating the upper set.) The lower set of rollers is rotated by similar devices applied at the upper end of the lower casing and partially shown in Fig. 1. An inclined shelf 3 is arranged above the rollers to keep the fruit from lodging between the side of the casing and the rollers.

The fruit to be assorted is placed in a hopper K, having at its upper end a tight bottom

N' and at its lower end a grated bottom M, and underneath is placed an apron N to receive dirt and leaves which pass through the grates. Said hopper is provided with an extensible leg L and is pivoted to a bracket O, arranged and secured to the side of side boards A, and is adapted to fold over and rest on the upper casing for compactness in moving. P' is an apron or screen which hangs across the upper end of the upper casing, of flexible material, and spreads the fruit somewhat upon its entering upon the incline. Power being applied to the treadle, the belt F moves longitudinally down the casing and is prevented from sagging by bridge G. Rolls 2 revolve in the direction indicated by the arrows in Fig. 3. The fruit, after leaving the hopper K, is carried downward by the belt F and stirred by rollers 2. The distance between the periphery of the rollers 2 and the sides of bridge G determines the size of fruit that is to constitute the different grades. Fruit too large to pass between the rolls and bridge is carried to the lower end of the upper casing, and, falling upon the bottom II² of the spout, is conducted into the basket I', which rests upon the table J. The spouts are provided with doors S' S to keep the fruit from escaping from the machines while the baskets are being changed. The smaller fruit falls through between rollers 2 and bridge G, and is conducted by bottom board II' to the upper end of the casing beneath, having a like set of rolls, belt, and bridge and side boards A'', and fruit too large to pass through between rolls and bridge passes through the box and is conducted by spout, having bottom board II³, to basket I², which rests upon the floor, while the smaller fruit, after passing through between the rolls and bridge, is conducted by centrally-inclined bottom boards II³ and II⁴ into a spout II⁶, and delivered into a basket I³ at the side of the machine.

One or more casings or systems may be pivoted in the same frame, adapted to assort into two or more grades; but I prefer two casings

or boxes adapted to assort into three grades, as described.

What I claim, and desire to secure by Letters Patent of the United States, is—

1. In assorting mechanism, a box or casing provided with an inclined bottom pivoted in a suitable casing, a bridge secured to said bottom, a roll journaled to said box arranged parallel to said bridge, and a belt for rotating said roll, substantially as set forth.

2. In assorting mechanism, in combination with a box or casing having an inclined bottom and pivoted in a suitable casing, a bridge arranged along said bottom near the middle, rolls arranged upon each side of and parallel to said bridge, and belts and shafting for rotating said rolls, substantially as set forth.

3. The assorting-rollers 2, provided with ribs or flanges 4, in combination with the bridge G and belt F, arranged substantially as set forth.

4. An assorting mechanism consisting of a box having an inclined bottom and pivoted to adjust in a suitable frame, a bridge G, arranged and secured to the bottom of said box, a belt F, arranged to travel along said bridge, and an assorting-roll, as 2, having a rib 4 and a shaft, pulley, and belt for rotating said roll, substantially as set forth.

5. An assorting mechanism consisting of a series of casings, arranged one above the other, pivoted in a suitable frame, each casing having an inclined bottom, a bridge G, and a belt F, arranged to travel along said bridge, pulleys for operating said belt, rolls arranged upon each side of the bridge journaled to the casing, belts for rotating said rolls, and an inclined shelf, as 3, secured above the rolls, substantially as and for the purposes set forth.

In testimony whereof I affix my signature in presence of two witnesses.

HENRY H. HUTCHINS.

Witnesses:

DENNIS L. ROGERS,

LUTHER V. MOULTON.

Riverside Heights O. G. Assn. et al. 509

[Defendants' Exhibit "Ish Patent."]

J. T. ISH.
FRUIT GRADING MACHINE.

No. 458,422.

Patented Aug. 25, 1891.

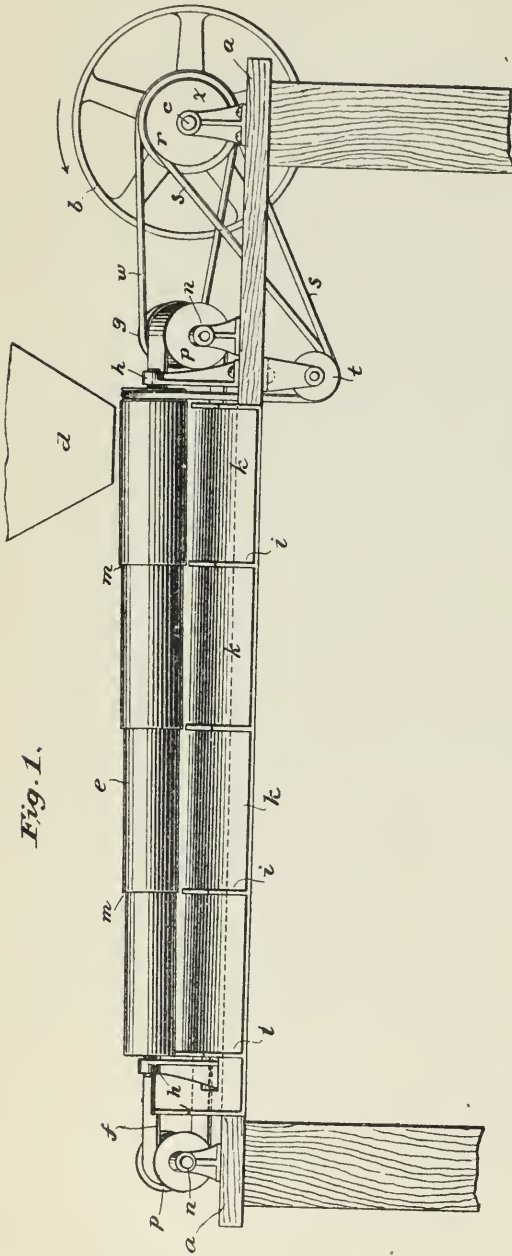


Fig. 1.

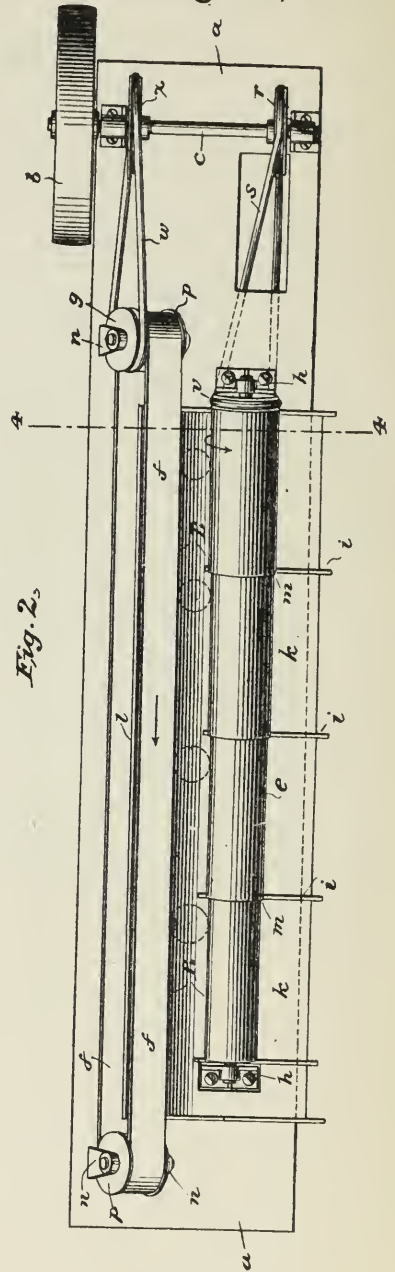


Fig. 2.

Witnesses
Geo. W. Breech.
Edward Thorpe.

Inventor
James T. Ish.
By his Attorneys
Howler & Fowler

J. T. ISH.
FRUIT GRADING MACHINE.

No. 458,422.

Patented Aug. 25, 1891.

Fig. 1,

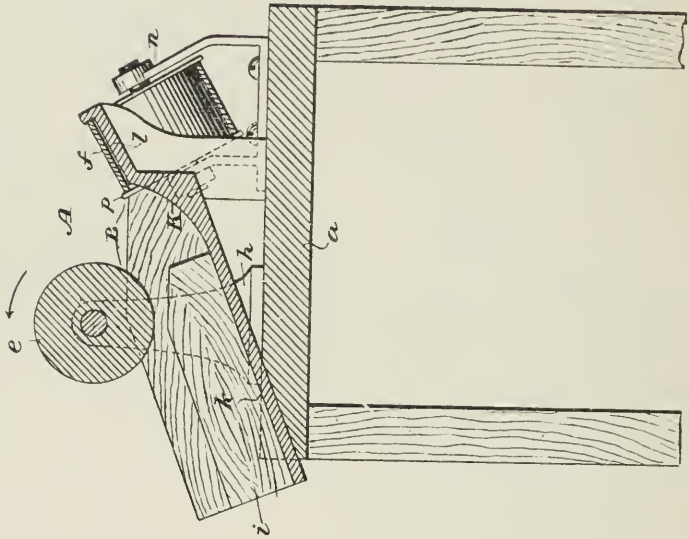
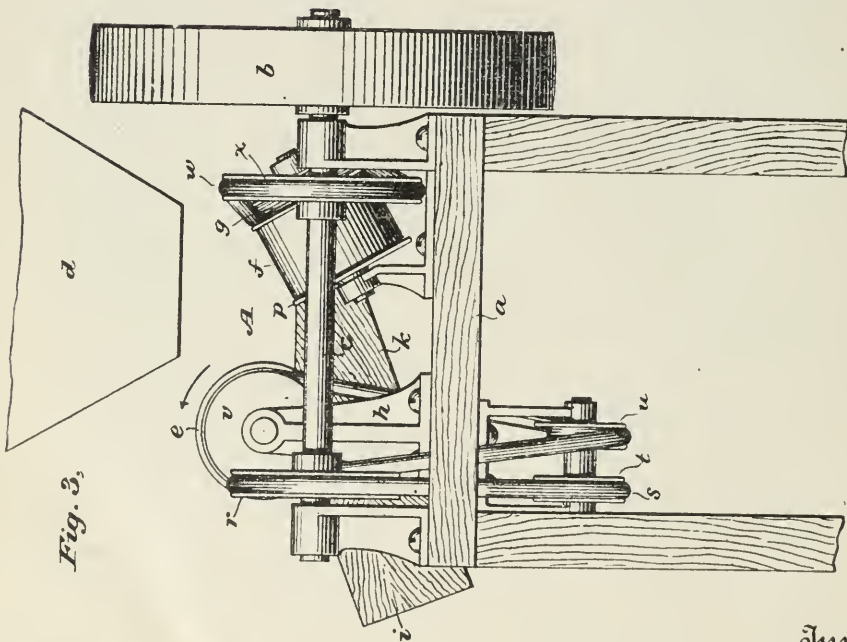


Fig. 2,



Witnesses
Geo. W. Duck.
Edward Thorpe.

Inventor
James T. Ish.
By his Attorneys
Fowler & Fowler

UNITED STATES PATENT OFFICE.

JAMES T. ISH, OF SAN FRANCISCO, CALIFORNIA, ASSIGNOR TO J. L. MOSHER,
T. H. CHANDLER, AND J. B. ROBINSON, OF SAME PLACE.

FRUIT-GRADING MACHINE.

SPECIFICATION forming part of Letters Patent No. 458,422, dated August 25, 1891.

Application filed June 21, 1889. Serial No. 315,089. (No model.)

To all whom it may concern:

Be it known that I, JAMES T. ISH, a citizen of the United States, residing at San Francisco, county of San Francisco, and State of California, have invented certain new and useful Improvements in Fruit-Separators, of which the following is such a full, clear, and exact description as will enable any one skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to a machine for separating or assorting fruit or vegetables according to size; and the invention consists in the certain novel and peculiar arrangements and combinations of the various parts of the machine, all as hereinafter fully described, and then pointed out in the claims.

In the accompanying drawings, illustrating my invention, Figure 1 is a side view of the machine embodying my invention. Fig. 2 is a top plan view of Fig. 1 with the hopper omitted. Fig. 3 is an enlarged end view of the machine. Fig. 4 is an enlarged sectional view, the section being taken on a plane indicated by line 4 4 in Fig. 2.

In the said drawings like reference-letters designate like parts throughout.

Referring to the drawings, *e* is a rotary member, consisting in a graduated cylindrical body or roller, which is mounted in suitable bearings *h h*, fixed upon the machine-frame. This roller is rotated in the direction of the adjacent arrows by means hereinafter described, and is slightly inclined to the horizontal in order to assist the passage of the fruit through the machine, and is stepped at *m m*, so that the roller is composed of cylindrical sections of different diameters, the diameters of the sections decreasing from the feed end to the delivery end thereof. The motion of the roller is obtained from the main shaft *c* by means of the belt-wheel *v*, belt *s*, pulleys *t u*, and the pulley *r* on the end of the roller, the shaft *c* being driven by the band-wheel *b*. The other member *f*, which, together with the graduated roller *e*, forms the space or grading-chute through which the fruit is passed, consists in an endless belt mounted on the flanged pulleys *p p*, which are set ob-

liquely and turn in bearings *n n*, secured upon the frame *a*. The pulley *u* near the shaft *c* is driven thereby through means of the grooved wheel *g*, belt *w*, and pulley *x*. When the roller is inclined, the belt *f* is also inclined at the same angle, thereby forming an inclined grading-chute along which the fruit may gravitate. The belt rotates in an oblique plane and in such direction as to cause its upper or working section to travel from the upper toward the lower end of the grading-chute *A*, as per the arrow shown thereon, in order to assist the movement of the fruit through the machine. The belt *f* is preferably placed so that the edge thereof adjacent the member *e* is in a plane parallel to the axis of said member, as will be readily understood from the drawings.

Instead of a flat belt a rope or any suitable preferred conveying means may be used to move the fruit along the roller *e*. The outer surface of the belt may be provided in any suitable manner with means for increasing the friction between the belt and fruit to give the latter a more positive motion. A canvas of coarse texture would answer the purpose very well, though, if preferred, catch fingers or bars may be placed on the belt. This belt acts in a delicate manner upon the fruit when combined with the roller *e*, rotating as described, and it will be seen that the fruit is not liable to be bruised or injured thereby.

To prevent the belt *f* from sagging, in order to maintain the graduated opening between the belt and the roller uniform, I provide the belt with a bed or support *l*, over which the upper or working portion of the belt travels, as will be understood from the drawings. If desired, this bed may be provided with anti-friction rollers to relieve the belt of the drag by lessening the friction between the same and the bed.

Beneath the members *e* and *f* is placed a delivery-chute *k*, which extends from one of said members downwardly and beneath the graduated space out under the other member, as will be understood from the drawings. The fruit in passing down from the graduated space passes into the chute from where it may be received in boxes or bags. This chute is provided at regular intervals with parti-

tions or divisions *i*, so that like sizes of fruit may pass into its proper division and be collected. To prevent the fruit from being bumped, and thereby bruised as it passes through the graduated space between the members into the delivery-chute, I curve or incline the latter, as at *K*, Fig. 4. This curve is preferably struck from the center of the roller *e*, so that the curve is concentric therewith, and this permits the fruit to be gradually rolled or lowered into the chute in an obvious manner, thereby preventing bruising of the same.

The operation of the machine will now be evident. The fruit is fed into the grading-chute *A*, formed by the members *e* and *f*, at the upper or right-hand end thereof by any suitable means—for instance, by the hopper *d*. The fruit then moves or is moved along between the members, and until it comes to a point where the width of the graduated space *B* corresponds to its diameter, when it passes down through the space into its proper division or chute. The dotted-in circles in the grading-way, Fig. 4, may be supposed to represent four pieces of fruit of different sizes that have reached their corresponding openings in the graduated space between the members *e* and *f*, and are about to pass down through the same into the delivery-chutes. The positive motion of the belt *f* will carry the fruit rapidly through the machine, the passage of which is also assisted by the rotary motion of the roller *e*. However, if preferred, gravity may be used to assist the movements of the fruit by inclining slightly the members *e* and *f*, as indicated in the drawings, though this inclination may not be adopted, as it is in no wise essential to the operation of my invention.

Having thus described my improvements in fruit and vegetable separators, what I claim as my invention, and desire to secure by Letters Patent, is—

1. In a fruit-separator, a grading way or chute for the fruit to pass along and be separated or assorted, the same comprising a suitably-mounted member and a traveling belt arranged adjacent to said member, so as to form in conjunction therewith the way or chute for the fruit.

2. In a fruit-separator, a grading way or chute for the fruit to pass along and be separated or assorted, the same comprising a graduated member and an endless traveling belt arranged parallel and adjacent to the said member, so as to form in conjunction therewith the way or chute for the fruit.

3. In a fruit-separator, a grading way or chute for the fruit to pass along and be separated or assorted, the same comprising a graduated member and an endless traveling belt arranged near the said member, so as to form in conjunction therewith the way or chute,

and provided with a support or bed for holding the working portion of the belt from sagging.

4. A fruit-separator comprising a graduated rotary member and a traveling endless belt arranged parallel and adjacent thereto.

5. A fruit-separator comprising two members arranged with a graduated space therebetween for the fruit to pass through and one or more delivery-chutes arranged beneath the said space between the members and formed with an inclined or curved bottom, the incline or curve of which extends from the working edge of one of the members downwardly, whereby the fruit passing through the space may be gradually rolled into the delivery-chute and prevented from falling or dropping therein.

6. A fruit-separator comprising two spaced members having a graduated space therebetween for the fruit to pass through, one of said members being cylindrical, one or more delivery-chutes arranged beneath the said space and formed with a curved bottom, the curve of which is concentric with that of the said cylindrical member and extends from the working edge of the said other member downwardly, whereby the fruit may roll into the delivery-chute.

7. A fruit-separator having, in combination, a rotary graduated roller *e* and an endless traveling belt *f*, arranged parallel thereto, with the graduated space between them, substantially as set forth.

8. A fruit-separator having, in combination, a rotary graduated roller *e*, suitably mounted and driven from shaft *c*, and an endless belt *f*, mounted on inclined pulleys *p p* and receiving its motion from shaft *c*, substantially as set forth.

9. A fruit-separator having, in combination, a rotary graduated roller *e*, suitably mounted and driven, and an endless belt *f*, provided with a belt or support *l* for preventing the sagging of the belt, substantially as set forth.

10. A fruit-separator having, in combination, a pair of spaced members forming therebetween a graduated space for the fruit to pass through, one of said members being cylindrical, such as the roller *e*, and one or more delivery-chutes *k*, arranged beneath the said space and having the bottom thereof curved, as at *K*, and such curve extending from the working edge of the other said member downwardly, substantially as set forth.

In testimony whereof I have hereunto set my hand and affixed my seal, in the presence of two subscribing witnesses, this 31st day of May, 1889.

JAS. T. ISH. [L. S.]

Witnesses:

H. A. COBB,

JOS. F. NOUNAN.

514

Fred Stebler vs.

[Defendants' Exhibit "Hutchins Patent No. 2."]

(No Model.)

2 Sheets—Sheet 1.

H. H. HUTCHINS. FRUIT AND VEGETABLE ASSORTER.

No. 465,856.

Patented Dec. 29, 1891.

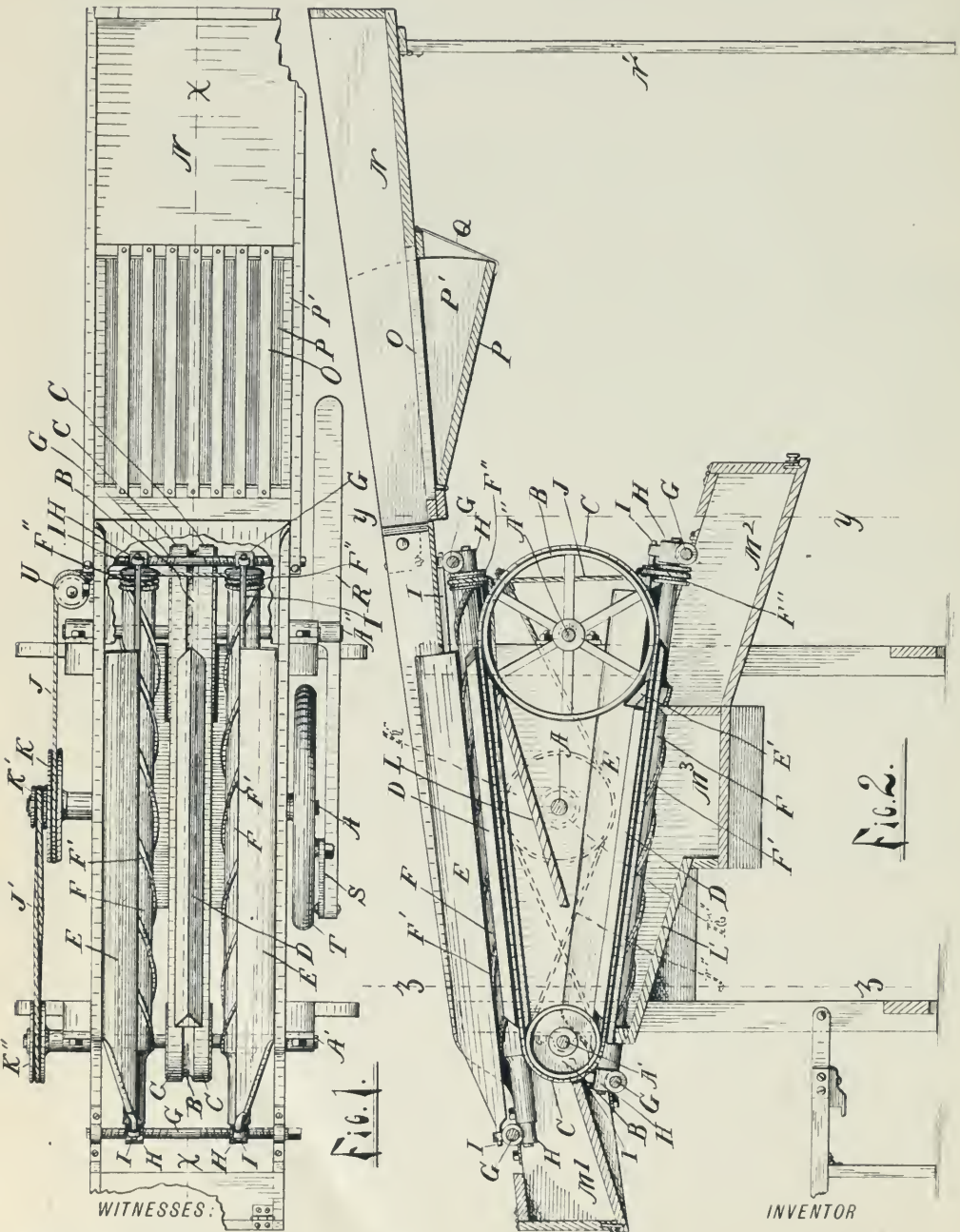


Fig. 1.

Fig. 2.

Charles R. Buchanan
Low Moulton

Henry H. Hutchins
BY
Luther V. Moulton
ATTORNEY.

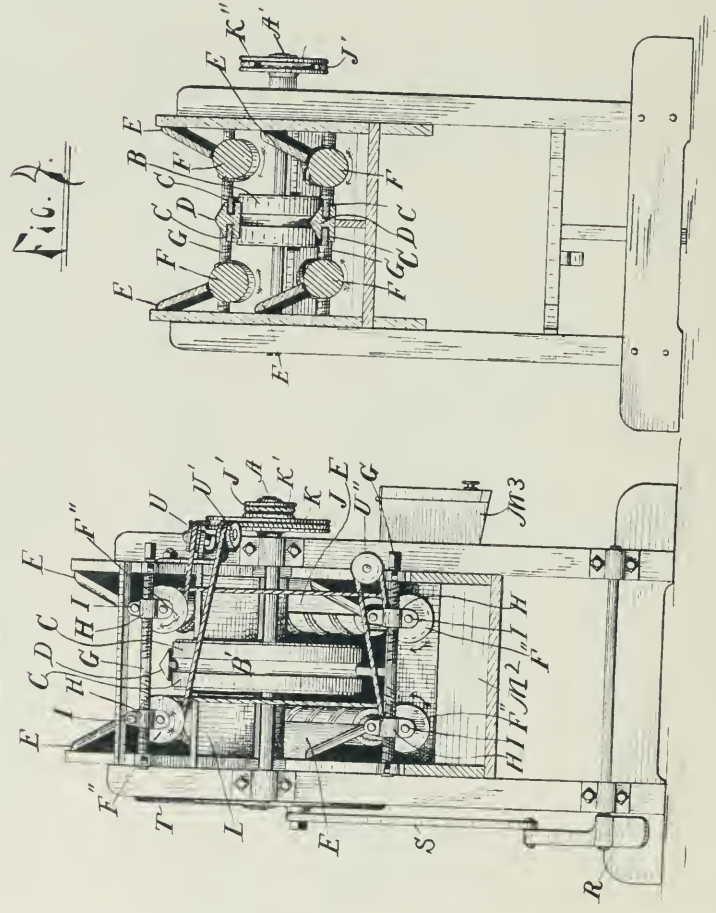
(No Model.)

2 Sheets—Sheet 2.

H. H. HUTCHINS.
FRUIT AND VEGETABLE ASSORTER.

No. 465,856.

Patented Dec. 29, 1891.



WITNESSES.

Charles R. Buchanan
Les Moulton

INVENTOR
Henry H. Hutchins

BY
Leslie V. Moulton
ATTORNEY.

UNITED STATES PATENT OFFICE.

HENRY H. HUTCHINS, OF GANGES, MICHIGAN.

FRUIT AND VEGETABLE ASSORTER.

SPECIFICATION forming part of Letters Patent No. 465,856, dated December 29, 1891.

Application filed August 6, 1891. Serial No. 401,844. (No model.)

To all whom it may concern:

Be it known that I, HENRY H. HUTCHINS, a citizen of the United States, residing at Ganges, in the county of Allegan and State of Michigan, have invented certain new and useful Improvements in Fruit and Vegetable Assorters; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in machines for assorting or grading fruits and vegetables, and more particularly to improvements in the style of machines for which I have made application for Letters Patent, filed January 30, 1890, Serial No. 338,693.

The object of my invention is to provide such machines with certain new and useful features hereinafter more fully described, and particularly pointed out in the claims, reference being had to the accompanying drawings, in which—

Figure 1 is a plan view of a device embodying my invention; Fig. 2, a longitudinal vertical section of the same on the line xx of Fig. 1; Fig. 3, an end elevation, partly in section on the line yy of Fig. 2; and Fig. 4, a transverse vertical section on the line zz of the same figure.

Like letters refer to like parts in all the figures.

Journaled within a suitable frame-work and near the center of the machine is the driving-shaft A, having the fly-wheel T at one end and the pulley K K' at the other end and rotated by the pitman S and treadle R.

Journaled near each end of the machine and in the same horizontal plane are two shafts A' and A'', each having at the middle a pulley B, around which are two parallel belts C C a short distance apart, said belts having their adjacent edges running in grooves in the opposite sides of a middle guide D, the upper side of which is oppositely inclined toward the respective rolls F, which rolls are parallel to and opposite the outer edges of said belts. These rolls are provided with spiral ribs F' and journaled in hangers II, which hangers are mounted upon transverse rods

G, each having right and left threads engaging corresponding threads in the respective hangers.

E are side boards arranged parallel to the rolls F, having their lower edges above the same, and pivoted to the hangers II by the rods I, their upper edges being inclined outward and resting against the inner sides of the frame.

K'' is a pulley on the shaft A', which is connected to K' on the driving-shaft by a belt J' to drive the belts C C. The pulley B on the shaft A' is smaller than the corresponding pulley on A'', whereby the upper and lower linear parts of the belts C C are oppositely inclined, the upper parts descending from the larger to the smaller pulley and the lower parts descending from the smaller to the larger pulley. The respective upper and lower guides D D, rolls F, and side boards E are also inclined to correspond with the portion of the belts C with which they coast.

Beneath the upper system is the inclined floor J, with its lower end near and above the upper end of the lower system, and beneath the lower system another inclined floor leading to the discharge-chute M¹. Beneath the respective lower ends of each system are other similar discharge-chutes M' M². On the lower end of the lower guide E is an inclined guard E', which deflects the stock away from the pulley B and prevents it from being caught between said pulley and the belts C C. All of the rolls F are provided with pulleys F'' on their adjacent ends, said pulleys being substantially in the same vertical plane and rotated in the direction indicated by the arrows by a single belt J, which runs from the upper side of the pulley K to the idler U, thence around the upper right-hand pulley, thence downward to and around the lower right-hand pulley, thence laterally to the idler U'', thence returning across to and around the lower left-hand pulley, thence upward to and around the upper left-hand pulley, thence across to the idler U', and thence to the lower side of the driven pulley K, being led around the various pulleys, as indicated by the arrows, and crossed, as indicated in the drawings.

N is the inclined feed-hopper, pivoted at its lower end to the frame of the machine and supported at its upper end by the pivoted leg M'. A portion of the floor of said hopper is grated, as shown at O, and beneath the same is an inclined chute P, having segmental sides P', pivoted at its upper end beneath the lower end of the grating and adjustably supported by one or more straps Q at its lower end.

The operation of my device is as follows: The fruit, vegetables, or other stuff to be assorted is put into the upper end of the hopper N, and, passing over the grating O, all sticks, leaves, and portions too small to be of value fall through upon the chute P, and, sliding down, fall to the ground or into a suitable receptacle. When out of use, the hopper N is turned over upon the top of the machine. P then incloses and protects the bars O from accidental damage. Passing down upon the upper system the fruit, &c., is divided by the inclined upper surface of the guide D, all but the largest falling through between the belts C and the rolls F, which rolls are adjusted relative to said belts by turning the rods G. These larger ones, resting on the outer edges of the belts, are carried forward by the same, and, aided by the spiral form of the ribs of the rolls, pass down and are discharged at M'. All those that pass through the upper system fall upon the upper end of the lower system, where they are again taken up by the inner surface of the same belts C C. These lower rolls, being properly adjusted to the said belts, take out another smaller grade, and the residue, passing through, is discharged at M³, while the middle grade is discharged at M². It will be observed that by the construction shown the rolls are equally and simultaneously adjusted by turning the rods G and that the side boards are at the same time automatically maintained in proper relation to the rolls; also, that the stuff passing through the screen O is discharged from the machine and the screen protected from accidental breakage when out of use.

What I claim is—

1. In combination with an inclined feed-hopper pivoted at one end, having a grated portion and adapted to fold upon the top of the machine, an oppositely-inclined chute pivoted to the lower end of said hopper at one end and adjustably attached to said hopper at its opposite end, said chute also adapted

to cover and protect said grated portion of said hopper, substantially as described.

2. The combination of two shafts in substantially the same horizontal plane, each having a pulley, one of which is larger than the other, two parallel belts around said pulleys, a guide having oppositely-inclined upper surfaces above the adjacent edges of said belts, and rolls parallel with the outer edges of said belts, substantially as described.

3. The combination of parallel rolls adapted to rotate in opposite directions, grading-belts between said rolls, oppositely-inclined pivoted side boards above said rolls, said side boards and rolls being journaled in hangers mounted on transverse rods having right and left screw-threads engaging corresponding threads in said hangers, substantially as described.

4. The combination of two shafts in the same plane, having pulleys of different sizes, two parallel belts around said pulleys, grooved guides engaging the inner edges of said belts, said guides having oppositely-inclined upper surfaces, and rolls parallel to the outer edges of said belts, substantially as described.

5. The combination of two shafts in the same plane, pulleys of unequal diameters or said shafts, parallel belts on said pulleys, guides having grooves engaging the adjacent edges of said belts and oppositely-inclined upper surfaces, and rolls opposite the outer edges of said belts, journaled in hangers mounted on rods having right and left hand screw-threads engaging corresponding threads in said hangers, and side boards above said rolls pivoted to said hangers at their lower edges and outwardly inclined at their upper edges, substantially as described.

6. In a fruit-grading machine, parallel belts, a guide having grooves engaging the adjacent edges of the same and oppositely-inclined upper side above the same, and rolls adjacent to the outer edges of said belts, adapted to rotate in opposite directions and having oppositely-inclined spiral ribs, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

HENRY H. HUTCHINS.

Witnesses:

DENNIS L. ROGERS,
LOIS MOULTON.

Riverside Heights O. G. Assn. et al. 519

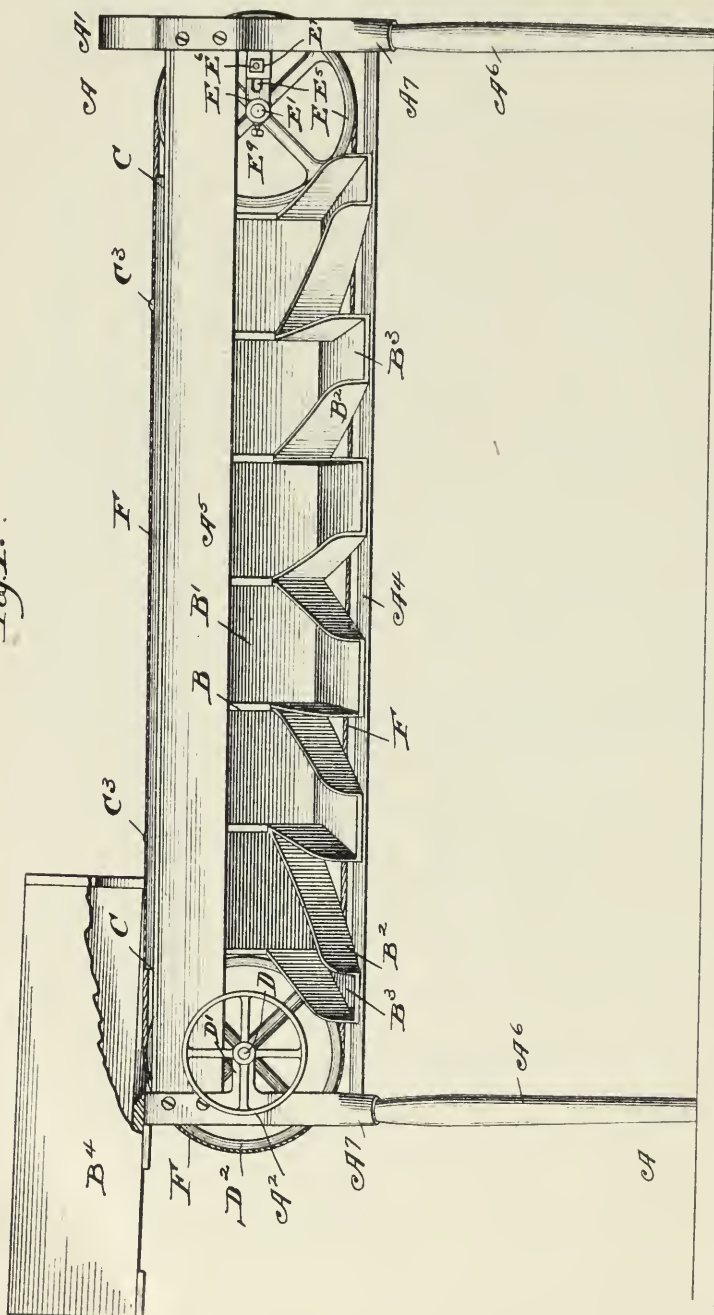
[Defendants' Exhibit "Woodward Patent."]

E. E. WOODWARD.
ORANGE SIZER.

No. 466,817.

Patented Jan. 12, 1892.

Fig. 1.



Witnesses:
 Fred Berlach
 J. S. Mann.

Inventor:
 E. E. Woodward,
 By L. T. Monism, Attorney.

E. E. WOODWARD.
ORANGE SIZER.

No. 466,817.

Patented Jan. 12, 1892.

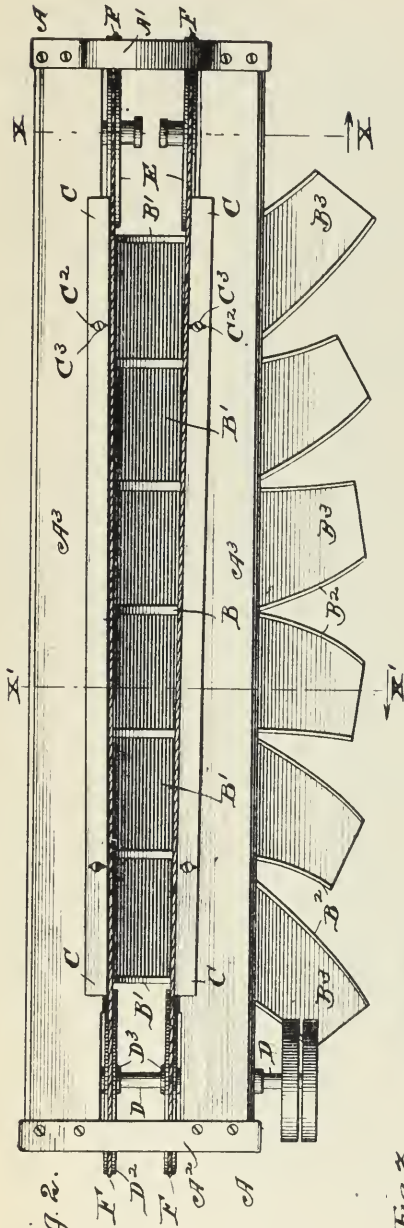


Fig. 2.

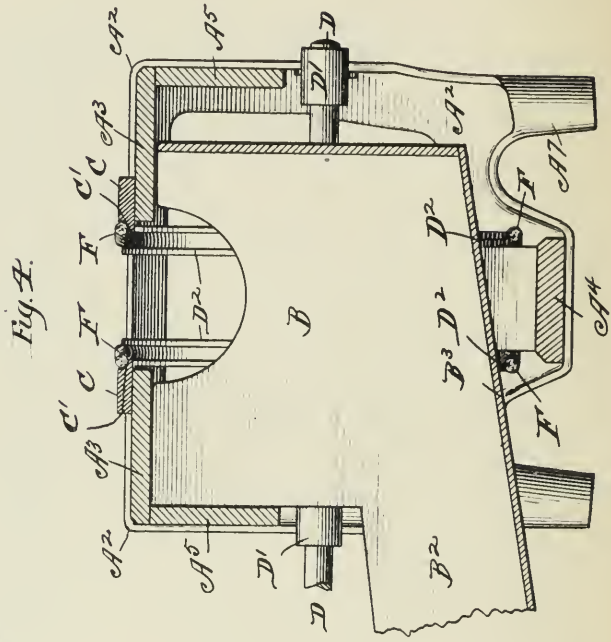


Fig. 1.

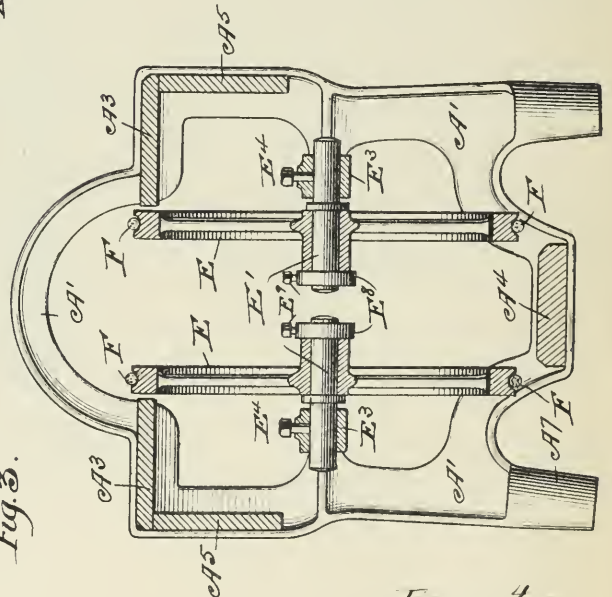


Fig. 3.

Witnesses:
Fred Geilach
J. Mann.

Inventor:
E. E. Woodward,
By L. L. Morrison,
Attorney.

UNITED STATES PATENT OFFICE.

ELMER E. WOODWARD, OF ROCKFORD, ILLINOIS.

ORANGE-SIZER.

SPECIFICATION forming part of Letters Patent No. 466,817, dated January 12, 1892.

Application filed July 30, 1891. Serial No. 401,180. (No model.)

To all whom it may concern:

Be it known that I, ELMER E. WOODWARD, a citizen of the United States, residing at Rockford, in the county of Winnebago and State of Illinois, have invented certain new and useful Improvements in Orange-Sizers, of which the following is a specification.

My invention relates to machines for sizing oranges and similarly-shaped fruit preparatory to packing them for the market; and it consists of certain new and useful features of construction and combinations of parts hereinafter described, and pointed out in the claims.

Referring to the accompanying drawings, which form a part of this specification, Figure 1 is a side elevation of a machine embodying my improvements. Fig. 2 is a top plan view of the same. Figs. 3 and 4 are vertical sections at the dotted lines X X and X' X', respectively, in Fig. 2.

Like letters of reference indicate corresponding parts throughout the several views.

A is the frame of the sizer, which is constructed, preferably, of cast-iron ends A' A², the top, bottom, and side pieces A³ A⁴ A⁵, secured thereto, and the legs A⁶, inserted into sockets A⁷ therein. The sizer is also divided by means of transverse partitions B into compartments B', which are provided with lateral outwardly-opening chutes B², having inclined bottoms B³.

B⁴ is a hopper.

C are conveyer-tracks, which I prefer to make of metal and provide with longitudinal grooves C' in or near their inner edges. The tracks C diverge from the hopper B⁴ and are laterally adjustable by means of transverse slots C² therein and screws C³, which are turned into the top pieces A³ of the sizer-frame.

D is a shaft mounted in bearings D'.

D² are peripherally-grooved pulleys mounted on the shaft D, on which they are longitudinally adjustable by means of set-screws (not shown) passing transversely through the outer ends of their hubs D³.

E are peripherally-grooved pulleys mounted on the axis E', which have longitudinal ad-

justment in the horizontal sockets E³, wherein they are secured by means of set-screws E⁴. The sockets E³ are also horizontally adjustable in the direction of the length of the sizer by means of the slots E⁵ therein and bolts and nuts E⁶ E⁷.

E⁸ E⁹ are collars and set-screws for supporting the pulleys E upon the axis E'.

F are endless conveyers connecting the peripherally-grooved pulleys D² E.

From the construction of the different parts composing the sizer it is obvious that the conveyer-tracks C, peripherally-grooved pulleys D² E, and the endless conveyers F admit of lateral coadjustment, so as to adapt the machine to be used in sizing oranges of any size. The construction and connections of the parts E³ enable the slack of the conveyers F to be readily taken up whenever required.

Power is applied to the shaft D in any desired manner.

The oranges to be sized are deposited in the hopper B⁴, whence the conveyers F carry them along the tracks C, between which they drop into the compartments B', according to their varying sizes. Thence they are carried by the chutes into separate receptacles provided for them.

These machines size oranges with the greatest accuracy and will not clog while in use.

I claim—

1. In combination, in an orange-sizer, a suitable frame, diverging conveyer-tracks laid thereon, conveyer-pulleys mounted on the frame, and endless conveyers connecting the pulleys and adapted to continuously traverse them and the tracks, substantially as and for the purpose specified.

2. In combination, in an orange-sizer, the frame, the conveyer-tracks, pulleys, and endless conveyers so mounted upon and connected with the former as to admit of lateral coadjustment, substantially as and for the purpose specified.

ELMER E. WOODWARD.

Witnesses:

L. L. MORRISON,
E. F. DOWLING.



Riverside Heights O. G. Assn. et al. 523

[Defendants' Exhibit "Fleming Patent."]

G. A. & C. F. FLEMING.
FRUIT GRADER.

No. 475,497.

Patented May 24, 1892.

Fig. 1.

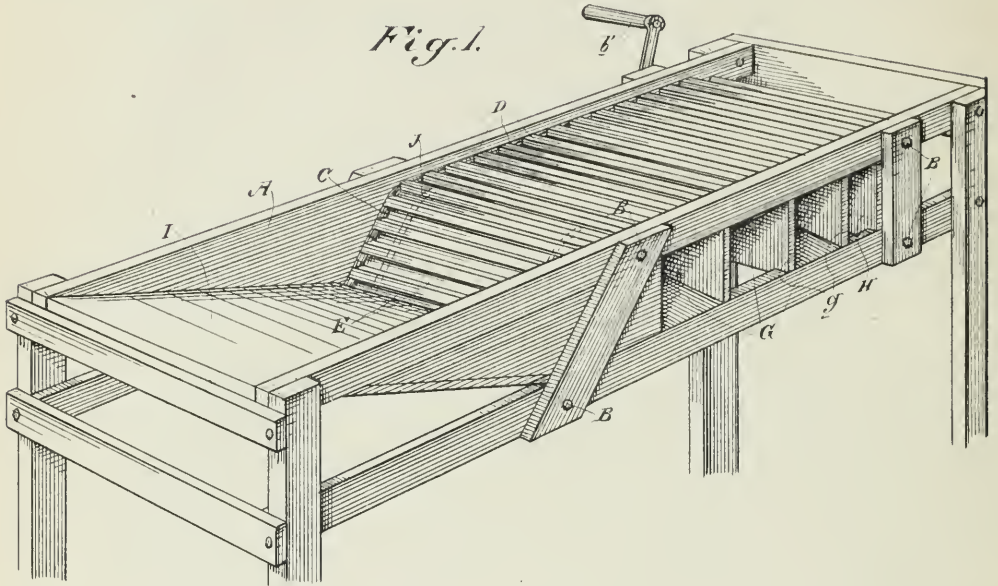


Fig. 2.

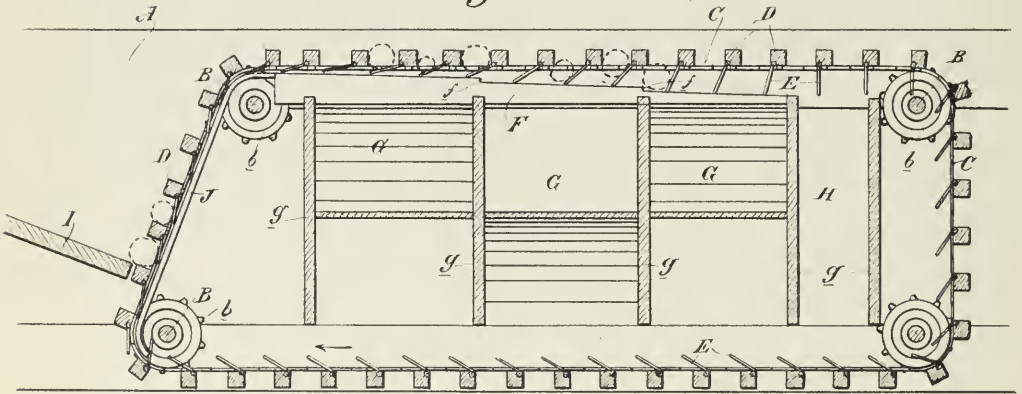


Fig. 3.

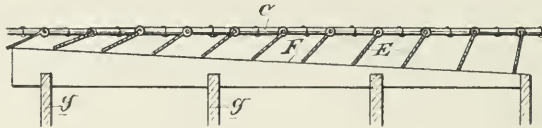
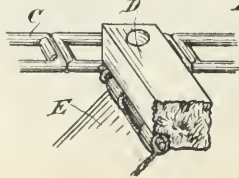


Fig. 4.



Witnesses,
B. House
H. F. Aschick

Inventors,
George A. Fleming.
Charles F. Fleming
By Devey & Co. attys

UNITED STATES PATENT OFFICE.

GEORGE A. FLEMING AND CHARLES F. FLEMING, OF SAN JOSÉ, CALIFORNIA.

FRUIT-GRADER.

SPECIFICATION forming part of Letters Patent No. 475,497, dated May 24, 1892.

Application filed July 16, 1891. Serial No. 399,748. (No model.)

To all whom it may concern:

Be it known that we, GEORGE A. FLEMING and CHARLES F. FLEMING, citizens of the United States, residing at San José, Santa Clara county, State of California, have invented an Improvement in Fruit-Graders; and we hereby declare the following to be a full, clear, and exact description of the same.

Our invention relates to the class of grading-machines for fruit and other materials composed of particles or pieces of different sizes.

Our invention consists in the several details of construction and relative arrangement of parts, hereinafter fully described, and specifically pointed out in the claims.

The object of our invention is to provide a grader of great capacity, simple in operation, and accurate and effective in results.

Referring to the accompanying drawings for a more complete explanation of our invention, Figure 1 is a perspective view of our machine. Fig. 2 is a vertical longitudinal section of same. Fig. 3 is a detail showing a continuously-inclined guide F and the drop-flaps E hinged directly to the charms. Fig. 4 is a perspective detail and section of one of the charms, cross-bars, and flaps.

A is the frame of the machine. In this are mounted cross-shafts B, each carrying end sprocket-pulleys *b*. Over these pulleys pass endless chains C, one on each side, to which a travel in the direction of the arrow is given by suitable means, as by the crank *b'*. Extending transversely between and secured to these side chains are the cross-cleats D, to which are hinged the swinging drop-flaps E. The flaps are of sufficient width when horizontal to practically close the spaces between the cross-cleats, and they thus form with the chains and cleats a continuous traveling table.

To the sides of frame A are secured the guides F for the flaps. These may be continuously inclined, as shown in Fig. 3, or they may be graduated by shoulders or offsets, as shown in Fig. 2 at *f*, whereby a series of breaks are formed, each lower than the one preceding. These guides lie directly under the ends of the flaps, which travel over and in contact with them. The head or top end of the guides is high enough to hold the flaps up approximately horizontal; but as the flaps

travel they are allowed to swing downwardly to increased distances, either gradually, as with the inclined guides, or abruptly, as with offset or shouldered guides. Thus the space between the lower edge of each drop-flap and the upper edge of the succeeding flap or of the succeeding cross-cleat is gradually widened as the flaps approach the tail end of the machine.

At proper intervals in the length of the machine under the traveling table and between the guides F are the several discharge-hoppers G, separated by partitions *g*, adjacent hoppers being preferably inclined in opposite directions. The final division H may be a straight chute to receive all the material which has failed to pass into the previous hoppers.

The forward sprocket-pulleys are arranged in such a manner that the chains and flaps may travel upwardly at an inclination the better to receive the fruit, which is supplied to the flaps by a feed-chute I.

The distance between the cross-cleats D is such that only one row of even the smallest fruit can be received from the feed-chute. Front guides J are located to hold the uprising flaps in position.

The flaps, as shown in Fig. 3, may be hinged directly to the side chains, dispensing with the cross-cleats; but we prefer to use the cleats as furnishing a better support for the fruit.

The operation of our grader is as follows: The fruit is placed upon the feed-chute I and by gravity runs down thereon to its lower end. Here it is deposited, one row at a time, upon each uprising flap, and said row is carried up thereby to the top. Where the cross-cleats D are used the fruit is held well between them. Now as the flaps travel over the inclined or graduated guides F they gradually or intermittently drop down to increasingly-lower positions or angles. When over the first hopper, they have dropped only enough to allow the smallest fruit to pass through the space between their lower edge and the upper edge of the succeeding one or of the succeeding cross-cleat. When over the second hopper, they have dropped enough farther to allow fruit of the size next larger to drop through, and so on throughout the machine.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is--

526 1. In a fruit-grader, a traveling table, upon which the fruit is carried, said table having a drop-bottom, and an underlying inclined or graduated guide upon which said bottom rests, whereby it may drop to different distances to discharge fruit of different sizes, substantially as herein described.

2. In a fruit-grader, a traveling table for carrying the fruit, consisting of a series of swinging drop-flaps forming the table-bottom, and means for separately controlling the drop of each flap to different angles to effect the discharge therefrom of different-sized fruit, substantially as herein described.

3. In a fruit-grader, a traveling table for carrying the fruit, consisting of a series of swinging drop-flaps forming the table-bottom and underlying inclined or graduated guides upon which said flaps rest and travel, whereby they are allowed to drop to different angles to discharge fruit of different sizes, substantially as herein described.

4. In a fruit-grader, the combination of endless traveling side chains, a series of parallel transverse drop-flaps carried by said chains and forming therewith a table for the reception and carrying of the fruit, and a means for controlling the drop of said flaps to different angles to discharge fruit of different sizes, substantially as herein described.

5. In a fruit-grader, the combination of endless traveling side chains, a series of parallel transverse drop-flaps carried by said chains and forming therewith a table for the reception and carrying of the fruit, and a means for controlling the drop of said flaps to dif-

ferent angles to discharge fruit of different sizes, consisting of inclined or graduated guides over and upon which the flaps travel and rest, substantially as herein described.

6. In a fruit-grader, the combination of endless traveling side chains, a series of parallel cross-cleats secured to said chains, a series of parallel transverse drop-flaps hinged to the cross-cleats and adapted to receive and carry the fruit, and means for controlling the drop of said flaps to different angles to discharge fruit of different sizes, substantially as herein described.

7. In a fruit-grader, the combination of the endless traveling side chains, the series of drop-flaps carried thereby, the inclined or graduated guides over and upon which said flaps travel and rest, and the underlying series of hoppers, substantially as herein described.

8. A fruit-grader consisting of the frame, the endless traveling side chains mounted therein, the series of drop-flaps carried by the chains, the front guides for holding the up-rising flaps in position, the feed-chute for supplying the fruit to the flaps, the inclined or graduated guides over and upon which the flaps travel and rest, and the underlying hoppers, substantially as herein described.

In witness whereof we have hereunto set our hands.

GEORGE A. FLEMING.
CHARLES F. FLEMING.

Witnesses:

E. M. RASENTHAL,
F. C. ENSIGN.

Riverside Heights O. G. Assn. et al. 527

[Defendants' Exhibit "Burke Patent."]

(No Model.)

2 Sheets—Sheet 1.

A. C. BURKE.
FRUIT SIZER.

No. 482,294.

Patented Sept. 6, 1892.

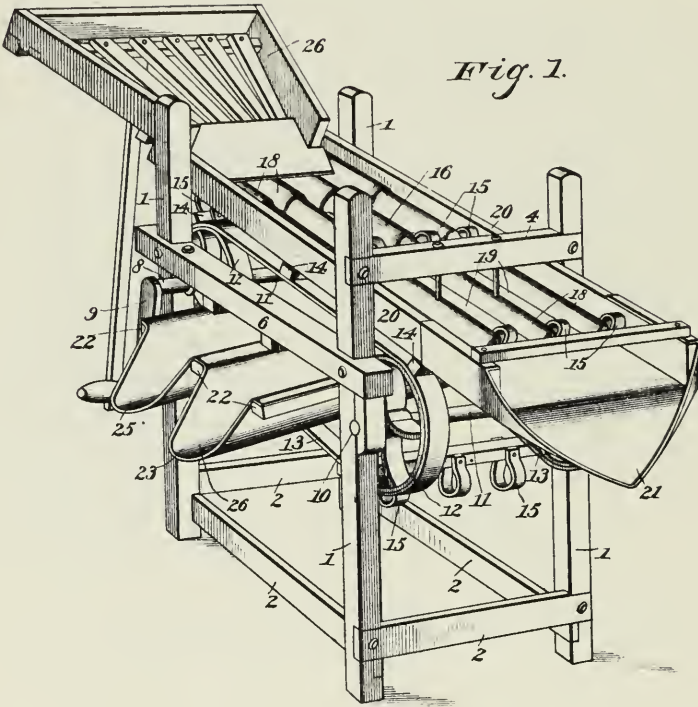


Fig. 1.

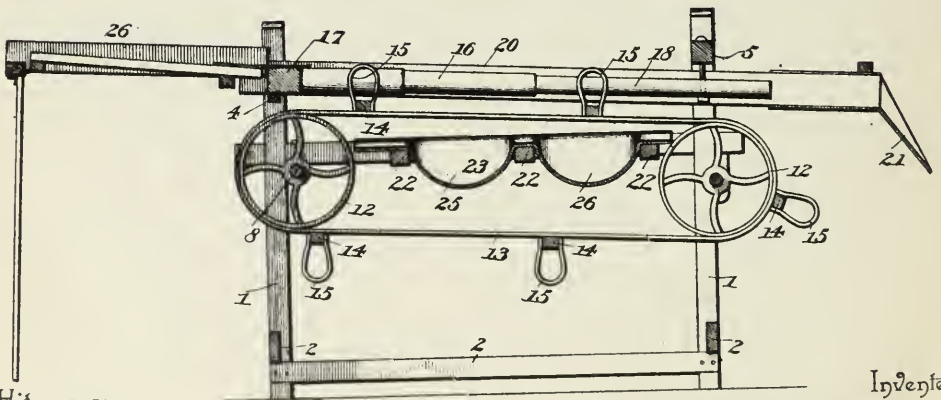


Fig. 2.

Witnesses:

J. M. Sutherland.
J. H. Siggers.

Inventor,

Ashbel C. Burke,

By *Hess* Attorneys,

C. A. Snow & Co.

(No Model.)

2 Sheets—Sheet 2.

A. C. BURKE.
FRUIT SIZER.

No. 482,294.

Patented Sept. 6, 1892.

Fig. 3.

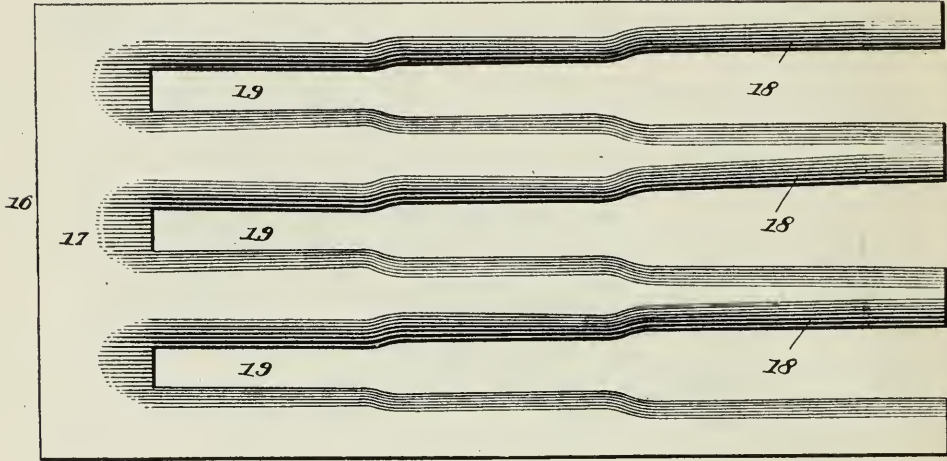


Fig. 4.

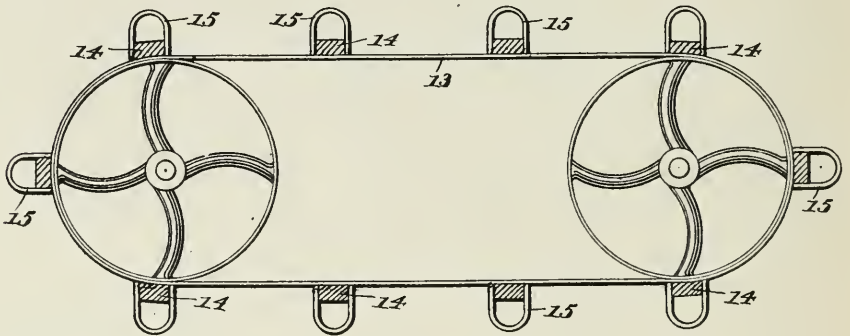
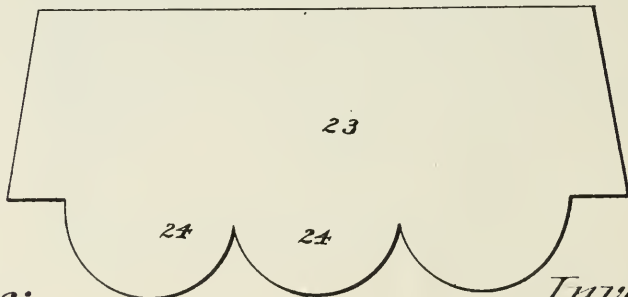


Fig. 5.



Witnesses:

John Dett. jr
John H. Berleman

Inventor:

Ashbel C. Burke.

ASHBEL C. BURKE, OF GYPSUM, ASSIGNOR TO D. A. SCOTT, OF CATAWBA ISLAND, OHIO.

FRUIT-SIZER.

SPECIFICATION forming part of Letters Patent No. 482,294, dated September 6, 1892.

Application filed March 19, 1891. Serial No. 385,707. (No model.)

To all whom it may concern:

Be it known that I, ASHBEL C. BURKE, a citizen of the United States, residing at Gypsum, in the county of Ottawa and State of Ohio, have invented a new and useful Fruit-Sizing Machine, of which the following is a specification.

My invention relates to improvements in fruit-sizing machines, the objects in view being to provide a machine of cheap and simple construction into which small fruits may be promiscuously introduced and which will automatically and without any injury whatever size or separate the same in accordance with their respective sizes.

Other objects and advantages of the invention will hereinafter appear, and the novel features thereof will be particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a perspective view of a fruit-sizing machine constructed in accordance with my invention. Fig. 2 is a longitudinal section thereof. Fig. 3 is a detail and plan of the sizing-table. Fig. 4 is a sectional view of the feed-belt and its pulleys. Fig. 5 is a plan view of the blank from which the canvas discharge-spouts are formed.

Like numerals of reference indicate like parts in all the figures of the drawings.

In practicing my invention I employ a framework which may be any desired construction adapted for the purpose in view, and the same comprises a series of four vertical posts 1, which are connected near their bottoms by suitable tie-bars 2 and near their upper ends by front and rear cross-bars 4 and 5, respectively. The front and rear posts are connected by side bars 6, and in these near their rear ends there is journaled in suitable bearings formed on the under side of the bars 6 a transverse shaft 8, one end of which is provided with a crank-handle 9, whereby the shaft may be operated. Below the bars 6 in the front pair of posts 1 bearings 10 are formed, and in these bearings a second shaft 11 is journaled. Both the shafts 8 and 11 have mounted thereon two pulleys 12, which pulleys are connected by a pair of longitudinally-disposed belts 13. These belts are con-

nected at intervals by transverse slats or cleats 14, and each slat is provided with a series of inverted-U-shaped resilient fingers 15, preferably formed of strips of rubber bent in the U form or shape and having their ends 55 secured to the front and rear edges of the cleats. The several series of resilient fingers are in alignment with each other, for the purpose hereinafter described.

16 designates the distributing-table, and 60 the same consists of a rear cross-bar 17, from the front edge of which projects a series of tines 18. These tines pass under the front cross-bar 4, while the rear end of the distributing-table rests upon the rear cross-bar 5, so that, as will be seen, the table declines from the rear to front. These series of tines decrease in width from their rear ends, and inasmuch as they are spaced apart they form slots or passages. These slots or passages, 70 designated as 19, are by the reduction of the tines smaller at their rear ends than at their centers, and smaller at their centers than at their front ends, whereby a fruit started at the upper end of the slot or track, if too large 75 to drop through the rear portion of track, will pass to the central portion, and if still too large will pass on to the front portion, and if still too large for this portion will pass over the front ends of the tines. A pair of side 80 bars 20 are bolted to the inner sides of the longitudinally-opposite posts 1, and these side bars project beyond the ends of the tines of the distributing-table and have secured thereto a canvas chute or mouth 21, into 85 which the fruit may fall when too large to pass between the tines.

22 designates a series of transverse bars, which are located between the pulleys 13 and the upper and lower side of the endless feed- 90 belts. These cleats are located below the beginning of each reduced portion of the tines. 23 designates a blank of canvas, one edge of which is provided with the three scallops 24. This blank of canvas is mounted over the se- 95 ries of bars 22 and between the bars sags, so as to form chutes 25, 26, and 27, the first being under the nearest portion of the tracks between the tines, the second being under the middle portion of the tracks, and the third 100

being under the end or front portion of said tracks.

This completes the construction of the machine, whose operation is as follows: The fruit is introduced, preferably, by means of an inclined tray 26, located at the rear end of the machine upon the upper end of the distributing-table, and passing upon the latter distributes itself over the several tracks, down which it rolls or is carried by means of the resilient fingers that extend up between the times or through the tracks. These fingers prevent the fruit from rolling too fast or bumping from side to side and becoming injured, and to the contrary, conduct the fruit quietly without injury along the tracks until each fruit arrives opposite that portion of the tracks which is sufficiently large to permit it fall through, which it does, and being caught by its proper canvas chute arranged under the tracks is discharged by the chute into a basket or other receptacle that may be placed at the end of the chute for its reception. All fruit that is too large to pass through the tracks passes on to the end chute 21 and is deposited by the latter into a receptacle placed thereon.

From the foregoing description it will be seen that I have provided a machine of great simplicity and adapted to divide or classify the several grades of fruit, and that I accomplish this without any injury or bruising of the fruit whatever, which is principally caused by the fact that the fingers are resilient, and being slightly bent by the fruit the latter, in a manner as will be obvious, lies upon the fingers and is supported thereby, so that the bumping and tumbling from side to side of the tracks by the fruit is obviated, and the same is conducted gently down the inclined tracks, where it is caught by canvas chutes, which will not bruise it, and subsequently deposited in its proper receptacle.

Having described my invention, what I claim is—

1. In a fruit-sizer, the combination, with a

framework, a front and a rear shaft, pulleys mounted on the shafts, endless belts connecting the pulleys, a series of cleats connecting the belts, resilient fingers extending upward from the cleats in line with each other, and chutes formed of canvas and arranged under and transverse to the belt, of a superimposed distributing-table having a series of slots graduated in width and increasing in size over each successive chute, the fingers of the belt extending through the slots, and a chute at the end of the table, substantially as specified.

2. In a fruit-sizer, the combination, with the framework and a distributing-table having a series of slots, of an endless belt located under the table and having a series of fingers extending through the slots, and transverse troughs arranged under said slots, which slots increase in width from rear to front above the troughs, substantially as specified.

3. In a fruit-sizer, the combination, with the distributing-table having a series of longitudinally-disposed slots increasing in size at intervals from rear to front, side bars located at the sides of the table and having their ends extending beyond the front end of the table and connected by a canvas chute, of a front and rear shaft, one of which is provided with a crank, a pair of pulleys mounted on each shaft, endless belts passing around the pulleys, cleats connecting the belts, inverted-U-shaped resilient fingers secured to the front and rear edges of the cleats and projecting through the slots of the table, the transverse series of bars located between the upper and lower sides of the belt and at the beginning of each increase of width in the slots, and the canvas blank mounted on the bars and sagging between the same, the end of the blank between the bars being scalloped, substantially as specified.

ASHBEL C. BURKE.

In presence of—
JOHN DETLESS,
THEODORE LINDEMANN.

[Defendants' Exhibit "Jones Patent 1894."]

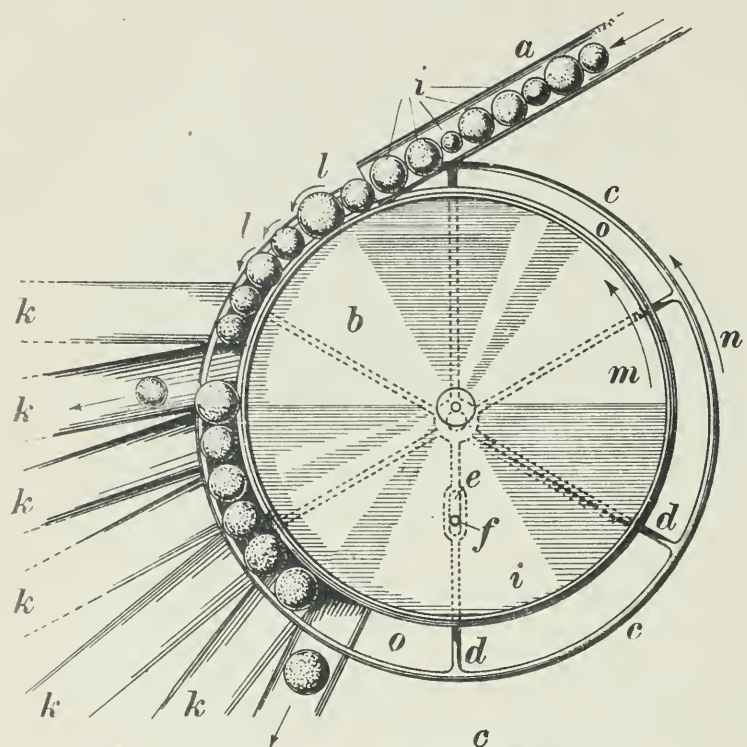


Fig. 1,

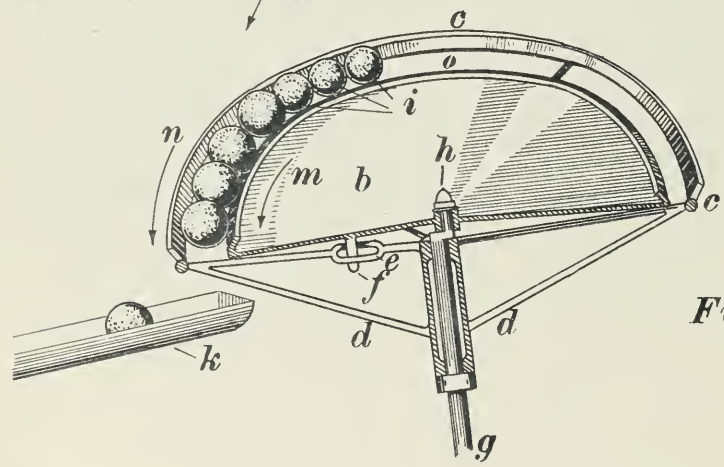


Fig. 2,

Witnesses.

S. C. Muller
Wm Stillman

Inventor,

H. C. Jones

UNITED STATES PATENT OFFICE.

534

HENRY C. JONES, OF ORANGE CITY, FLORIDA.

FRUIT-SIZER.

SPECIFICATION forming part of Letters Patent No. 529,032, dated November 13, 1894.

Application filed June 28, 1894. Serial No. 515,914. (No model.)

To all whom it may concern:

Be it known that I, HENRY C. JONES, a citizen of the United States, residing at Orange City, in the county of Volusia and State of Florida, have invented a new and useful Machine for Assorting Fruit According to its Size, of which the following is a specification, reference being had to the accompanying drawings, in which—

Figure 1 is a plan view, and Fig. 2 a perspective view partly in section.

Certain fruits as oranges are packed for shipment in boxes or crates of uniform size, and it is necessary before beginning to pack to know how many oranges there will be to a box so as to arrange the tiers and layers accordingly.

My invention comprises a wheel *c* supported by spokes *d* and free to revolve around a stationary shaft *g*. The axis of this wheel is inclined to a slight angle to the perpendicular as shown in Fig. 2. Just above this wheel and at the same angle is a smaller wheel *b*, also free to revolve, not about *g* as a center but about *h*, Fig. 2. One spoke of the large wheel is made into a loop at *e*, and a pin *f* of the small wheel engages therein, so that as either wheel revolves the other follows, as at *m*, *n*, Fig. 1, and the two wheels being eccentric this relation will exist as they both revolve. One wheel being smaller than the other a margin will be left at *o—o*, and the wheels not being concentric this margin will be crescent shaped, being just smaller than the smallest orange at the top and just wider than the widest at the bottom.

Now it will be readily seen that if oranges, are placed in the narrow space at the top, their weight will cause the wheels to revolve by reason of the angle of inclination, and as they revolve the opening *o* gradually widens, allowing the fruit to drop through wherever the opening is of suitable width. The oranges may be fed on through a spout as at *a* and drop through into other spouts *k*, leading off

as desired. Now the two wheels *b* and *c* being of different diameters have a different circumferential speed, the outer being the greater, so that an orange in the slot would not only revolve with the wheels but would also revolve around its own center as an axis as at *l*, *l*, so that if it went from the spout *a* with its greatest diameter across the opening *o*, it would be so revolved as to fall through in its proper place. Otherwise it might be given a false rating.

I am aware that rotary fruit assorters have been constructed but requiring motive power for their operation, and I am also aware that assorters have been made depending on a varying width of a tapering slot but in such cases the sides were straight and of considerable length instead of being circular and consequently more compact. So far as I know no attempt has ever been made to correct the natural tendency of an oval orange to fall with its greatest diameter across such a slot.

My invention has been reduced to practice and I desire to secure Letters Patent upon the following:

A fruit assorter consisting of a revoluble skeleton wheel inclosing a second and smaller wheel having its axis parallel to the first but eccentric thereto, so arranged as to provide an open marginal crescent shaped fruit passage between the rims of the wheels, the axis of each wheel inclined to such an angle that the weight of the fruit delivered on the upper edge will cause the wheels to revolve, either wheel communicating the motion to the other by a pin in one engaging in a slot in the other, the whole in connection with suitable spouts for conveying the fruit to and away from the wheels, all being substantially as described and for the purposes set forth.

H. C. JONES.

Witnesses:

S. C. FULLER,
A. M. STILLMAN.

Riverside Heights O. G. Assn. et al. 535

[Defendants' Exhibit "Cerruti Patent."]

(No Model.)

A. CERRUTI.
FRUIT GRADER.

No. 534,783.

Patented Feb. 26, 1895.

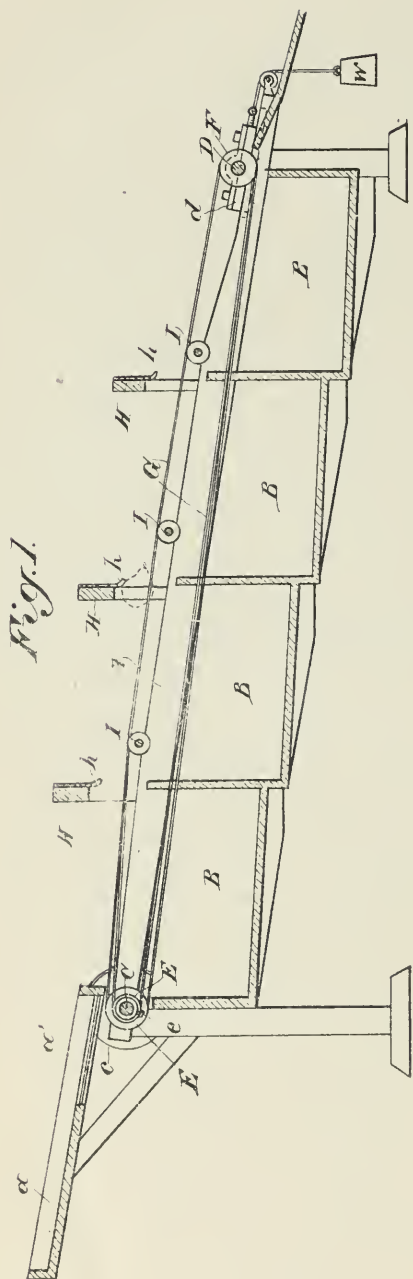


Fig. 1.

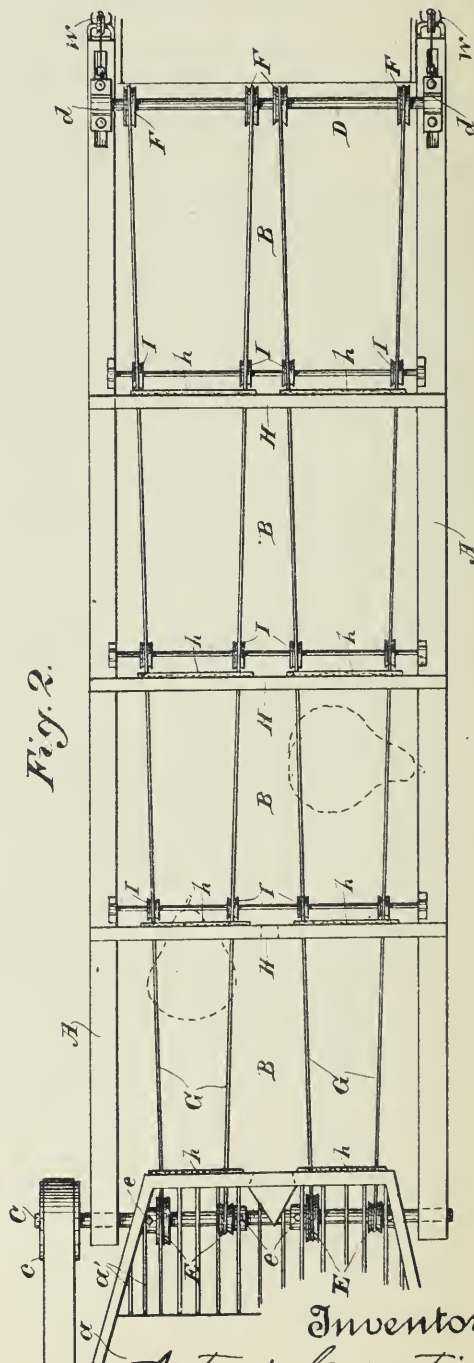


Fig. 2.

Witnesses,
G. H. House
J. P. Uschek

Inventor,
Antonio Cerruti
By Dewey & Co.
attys

ANTONIO CERRUTI, OF SAN FRANCISCO, CALIFORNIA, ASSIGNOR OF TWO-THIRDS TO FONTANA & CO., OF SAME PLACE.

FRUIT-GRADER.

SPECIFICATION forming part of Letters Patent No. 534,783, dated February 26, 1895.

Application filed August 28, 1894. Serial No. 521,510. (No model.)

To all whom it may concern:

Be it known that I, ANTONIO CERRUTI, a citizen of the United States, residing in the city and county of San Francisco, State of California, have invented an Improvement in Fruit-Graders; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to the class of machines for separating fruit according to size, and it consists of the constructions and combinations of parts hereinafter described and claimed.

The general object of my invention is to provide a simple and effective fruit grader.

Particular objects are to be found in the several features of improvements and will hereinafter appear.

Referring to the accompanying drawings for a more complete explanation of my invention,—Figure 1 is a longitudinal vertical section of my machine. Fig. 2 is a plan of same.

A is a suitable frame, the body of which is divided into a number of separate compartments B, to receive the different sizes of fruit. At the head of the frame is a feed platform *a* terminating in a grate or sifter *a'*, by which the débris is separated from the fruit, as the latter passes upon the carriers of the grader. At the head or upper end of the frame, the top of which is mounted at an inclination, as here shown, is a shaft C to which power is applied by any suitable means, as, for example, by means of a belt to the pulley *c*.

At the lower or foot end of the machine is a shaft D. Upon the shaft C are pulleys E, and upon the shaft D are pulleys F. Between these pulleys extend carriers G which consist of traveling endless bands of any suitable material and construction.

In practice, ropes are found to serve the purpose, and I have here shown them as such.

The pulleys E upon the shaft C at the head of the machine are nearer together than the pulleys F upon the shaft D at the foot of the machine, whereby the endless carriers G travel in divergent paths from the head to the foot of the machine, and the space between the carriers gradually widens from the upper to the lower end. Adjacent carriers traveling in divergent paths, as just mentioned, form one

pair, and there may be as many pairs of these carriers in the machine as may be desired for any suitable capacity. I have, for the sake of illustration, shown two pairs.

The operation of these parts as far as described is as follows:—The ungraded fruit rolls from the feed platform down upon the head of the carriers. It is supported by and between adjacent carriers, and is advanced by them. When the space between the two carriers becomes too wide, on account of their gradual divergence, for any fruit, said fruit will drop between them, while the larger ones will continue, until, as the space increases in width, the different sizes of fruit successively lose their support and drop between the carriers being thus assorted below in the different compartments B. In this operation there is no bodily rolling of the fruit, no jar, nor any forcible contact with any obstruction; but the fruit is carried along, without bruising, until its supports are lost, when it drops through.

I have, thus far, described my machine without reference to any difference in the rate of travel of the carriers of each pair, as my invention extends to the traveling carriers themselves irrespective of any difference in their rate of travel; for even when they travel at the same rate of speed, they will effect a very good assortment of the fruit; but in order to attain the highest efficiency in results, I make one of the carriers of each pair travel at a different rate of speed from that of the other member of the pair. This may be accomplished by any suitable and well known mechanism. I have, as the simplest form of such a mechanism, shown, in the present case, one of the pulleys E, as being larger than its adjacent pulley E, so that the carrier G, which passes over the larger pulley travels at a faster speed than that which passes over the smaller pulley E. This difference in the speed of the two carriers effects a turning of the fruit resting between them, and by this turning, the fruit is brought into the best position in which to fall through between the carriers, thus avoiding any clogging or any tendency to remain upon the carriers, by reason of the oblong shape of the fruit in some instances, or irregularities of any kind. In order, how-

ever, to insure this positive discharge of the fruit, by its being turned to the best position, I have, across the top of the frame, the cleas II to which are secured the flaps *h* made of some soft or flexible material, and which hang down in the path of the fruit. These flaps temporarily arrest or have a tendency to arrest the fruit momentarily, or so obstruct its movement that the differently traveling carriers will have a better opportunity to turn it into the proper position. In order to keep the carriers taut, the boxes *d* of the foot shaft D are mounted so that they can slide, and from these boxes weights *W* are suspended.

Although the carriers may travel in a straight plane I have found it best in order to increase their tautness and to prevent any sagging between the various supporting pulleys I, over which they pass, to arrange these supporting pulleys in a convex line so that the course of the carriers over them is in a convex path.

The various pulleys E are adjustably secured upon their shafts C by means of set screws *e* so that they may be set closer to or farther from each other to vary the divergence of the members of each pair.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a fruit grader, traveling separated carriers mounted upon end supports and moving in lines which diverge from one end to the

other, one of said carriers moving at a different rate of speed from that of the other carrier, substantially as herein described. 35

2. In a fruit grader, the combination of endless separated traveling carriers moving in divergent lines, and pulleys at each end over which the carriers pass, said pulleys being of different sizes whereby the rate of speed of one of said carriers is different from that of the other, substantially as herein described. 40

3. In a fruit grader, the combination, of endless traveling carriers separated from each other and moving in divergent lines, pulleys of different sizes at opposite ends of the machine around which the carriers pass whereby one carrier moves faster than the other, and means in the path of the fruit for temporarily arresting the movement of the same whereby its position between the carriers may be changed. 45

4. In a fruit grader, the combination of separated traveling carriers moving in divergent lines, one of said carriers moving at a different rate of speed from that of the other and the flexible arresting strips in the path of the fruit, substantially as herein described. 50

In witness whereof I have hereunto set my hand. 60

ANTONIO CERRUTI.

Witnesses:

WM. FRIES,
CHARLES A. LEMARD.

Riverside Heights O. G. Assn. et al. 539

[Defendants' Exhibit "Huntley Patent."]

A. D. HUNTLEY.
ORANGE SIZER.

No. 538,330.

Patented Apr. 30, 1895.

Fig. 1.

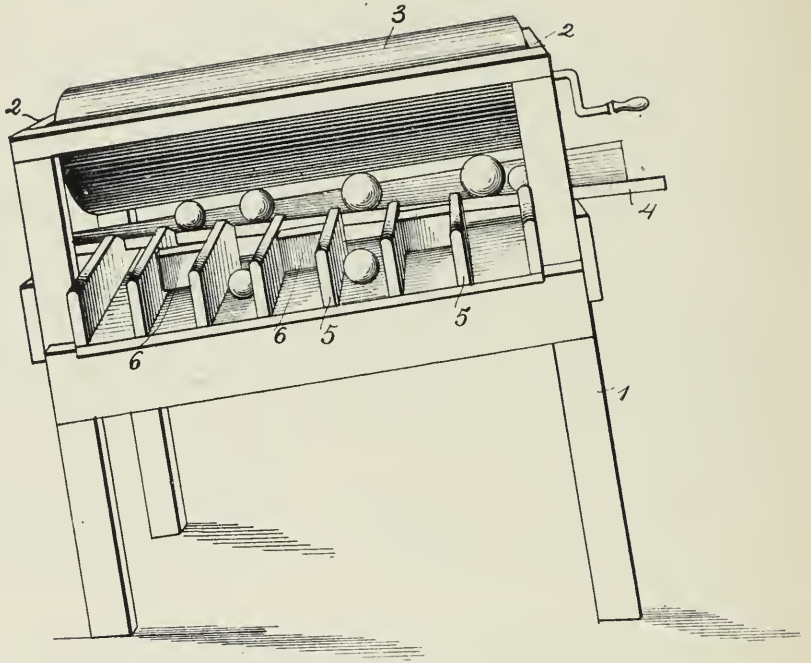


Fig. 2.

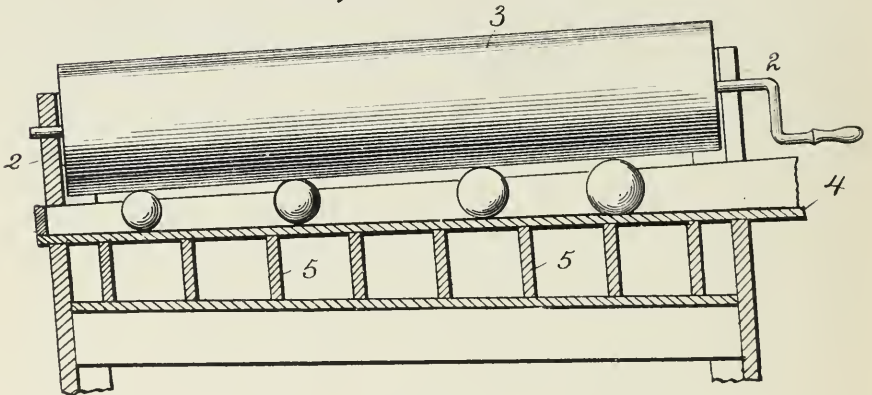


Fig. 3.



Witnesses.

Victor J. Evans.

Margie Wilson

Inventor.

A. D. Huntley

By E. M. Macbeth & Sons.
Attorneys.

UNITED STATES PATENT OFFICE.

ABIEL D. HUNTLEY, OF SAN MATEO, FLORIDA

ORANGE-SIZER.

SPECIFICATION forming part of Letters Patent No. 538,330, dated April 30, 1895.

Application filed January 12, 1895, Serial No. 534,667. (No model.)

To all whom it may concern:

Be it known that I, ABIEL D. HUNTLEY, a citizen of the United States, residing at San Mateo, in the county of Putnam and State of Florida, have invented certain new and useful Improvements in Orange-Sizers and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to machines for sizing and assorting fruits and vegetables, and consists in an improved orange sizer which will be hereinafter fully described and particularly pointed out in the claims.

Where oranges are grown in quantities, and are shipped to meet the competition which now exists in the orange industry, it is necessary to provide means for assorting the oranges according to their different sizes and grades. This can be more profitably done by a machine than by hand, as one laborer can, by the use of a proper machine, do the work which it would require several laborers to do if assorted by hand. The machine which I have devised for accomplishing this purpose is a very simple one—one that can be manufactured at little cost, and can easily be put into position for operation in any orange grove. It consists essentially of a revolvably mounted roller, and a support or guide way for the oranges placed in line with said roller and at an inclination to the same, so that whereas the largest oranges can be inserted at one end between the roller and the orange guide-way, only the small oranges can pass down the guide-way to the lower end of the same on account of the gradual diminishing distance between the roller and the guide-way. The revolution of the roller serves to roll the oranges out of the guide-way into suitably arranged discharge spouts as soon as the frictional contact between the roller and the orange is sufficient to cause the latter to be moved. The different oranges will be caught up in this manner at different points, and thus graded according to their size. This manner of separating the oranges does not bruise or injure the same, or render them unfit for long voyages and storage at the various points to which they may be shipped.

My invention is fully represented in the drawings which accompany and form a part of this application, in which the same reference numerals refer to the same or corresponding parts, and in which—

Figure 1 is a perspective view of my improved orange sizing machine. Fig. 2 is a longitudinal section of the same showing the inclination of the orange guide-way to the feed-roller. Fig. 3 is a section of the orange guideway showing the inclined sides of the same.

Referring to the drawings, 1 represents the frame work of my machine. As shown, it consists of a table, the legs of which at one end are shorter than those at the other end, so as to cause the top of the table to be inclined. The legs of this table are extended upward, and cross-pieces 2 are provided, in which is journaled the feed roller 3. The feed roller may be made solid if desired, but is preferably made hollow for the sake of lightness of construction. I usually make it of wood, but other material may be used if desired. Its surface is smooth so that it will not bruise the oranges with which it comes in contact. Below this roller and in-line with it is suspended above the top of the table 1, a guide-way or passage-way 4, for the oranges which are to be assorted according to their various sizes. This guide-way is in the form of a chute which has a curved or rounded surface, the curve having such relation to the size of the roller used that when in the action of the machine an orange is caught between the roller and the guide-way, and discharged over the side of the guide-way, it will not be subjected to any additional pressure as it passes up the rounded side of the guide-way. At the feed end of the machine the guide-way is farther removed from the roller than at the tail end of the machine, so that oranges of any size can be fed into the machine, but only the small oranges can pass to the tail end of the machine and there be discharged. I usually also narrow the width of the guide-way at the tail end of the machine so as to insure all of the oranges being assorted and sized. On the top of the table I provide suitable compartment or division boards 5, and I may use cut-off blocks 6, which serve to prevent the oranges, which

are of such a size as to be discharged into the compartment formed by the division boards between which the said cut-off block is placed, from rolling out of the wrong side of the table or platform.

The operation of my machine is as follows:— Oranges are fed into the feed end of the orange guide-way, and as they roll down the inclined guide-way are caught between the roller and the guide-way and are discharged over the side of the same at a point determined by the size of the orange. An exact gradation according to size is thus made, although the oranges are neither bruised or mashed, or in any way made unfit for travel. The cut-off blocks are used or not as working conditions may demand.

It is obvious that slight changes in construction may be made which will not escape the spirit and scope of my invention. The proportion of the parts may be changed, the number of compartments formed on the top of the operating table varied, and the feed roller be inclined to the discharge spout, instead of the latter being inclined to the former, as is the case in the construction shown.

In sizing oranges it is frequently desired at the same time to separate the "bright" and "russet" oranges. I can accomplish this end with my machine by placing two of my separating devices side by side on the same frame work, so that the attendant can feed bright oranges to one orange guideway, and russet oranges to the other guideway.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a machine for sizing oranges, the combination with a trough forming an orange guideway, of a roll journaled in a vertical plane above said trough, and in line with and at an angle to the same, whereby oranges will be caught between the surfaces of the roller and guideway, and discharged at points determined by the various sizes of the oranges, substantially as described.

2. In a machine for sizing oranges, the combination with a table or platform inclined as shown, of an orange guideway or trough, a feed roller, journaled above said table in line with said orange guideway or trough, and at an angle to the same, substantially as described.

3. In a machine for sizing oranges, the combination with an inclined trough having a curved side, forming an orange guideway of a roll, journaled in a vertical plane above said trough at an angle to the same, whereby the oranges will be caught between the surfaces of the roller and guideway, and discharged at points determined by the various sizes of the oranges, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

ABIEL D. HUNTLEY.

Witnesses:

A. F. BROWN,
J. A. CROSBY.

Riverside Heights O. G. Assn. et al. 543

[Defendants' Exhibit "Bailey Patent."]

R. G. BAILEY.
FRUIT GRADER.

(Application filed July 24, 1900.)

(No Model.)

Fig. 1

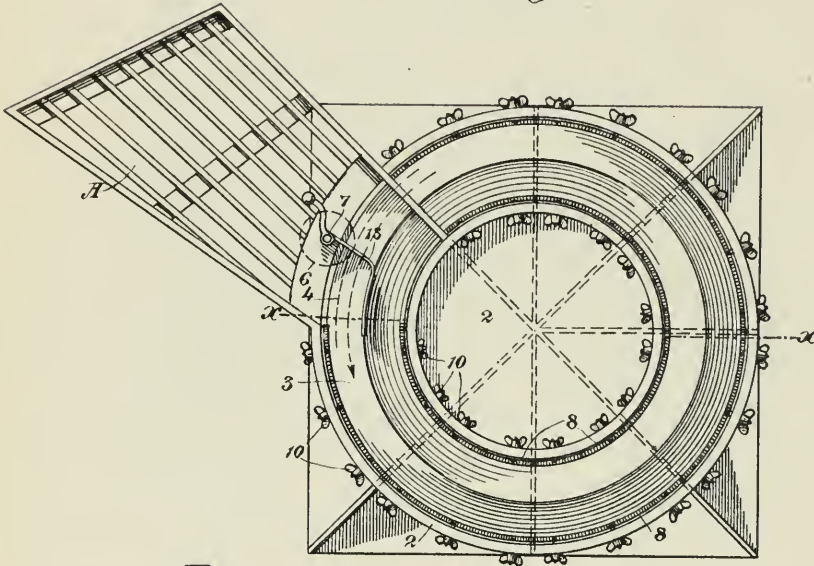


Fig. 2

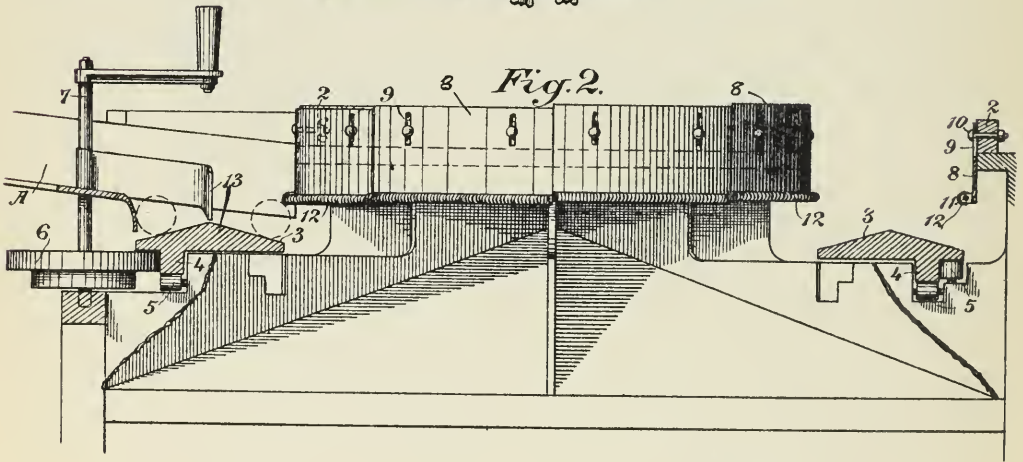


Fig. 3

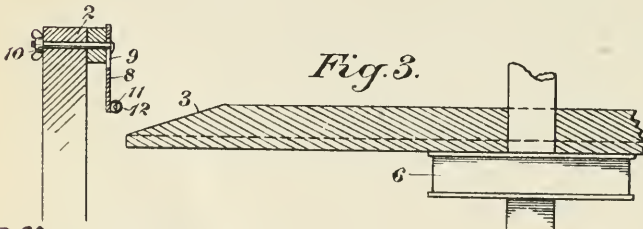
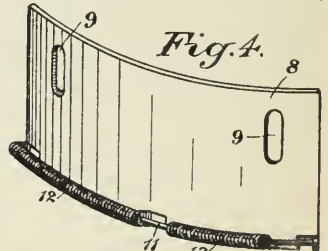


Fig. 4



Witnesses,
G. H. Morse
J. F. Ascheck

Inventor,
Richard G. Bailey,
By Dewey Strong & Co.

attus

UNITED STATES PATENT OFFICE.

RICHARD G. BAILEY, OF SAN MATEO, CALIFORNIA, ASSIGNOR TO GEORGE G. WICKSON, OF SAN FRANCISCO, CALIFORNIA.

FRUIT-GRADER.

SPECIFICATION forming part of Letters Patent No. 671,646, dated April 9, 1901.

Application filed July 24, 1900. Serial No. 24,653. (No model.)

To all whom it may concern:

Be it known that I, RICHARD G. BAILEY, a citizen of the United States, residing at San Mateo, county of San Mateo, State of California, have invented an Improvement in Fruit-Graders; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to an apparatus which is designed for the grading or assorting of fruits which are approximately globular in shape, such as oranges and the like.

It consists of a horizontally-rotating disk or ring with the rim or rims beveled or sloping from the upper surface downward, said disk or ring being made to rotate in a perfect plane, traveling on rollers placed underneath or from a central spindle, or both. Surrounding these rotating beveled rims is suspended a series of adjustable curved rollers so spaced in relation to the rotating beveled surface below them as to permit fruit approximately globular in shape to roll off in its proper place. The disk or ring is moved by any suitable mechanical device, so as to cause the fruit to travel around a circle on a continuous inclined plane until it finds a space below the curved-roller grading-guides of sufficient size to allow it to pass out to suitable receptacles.

The curved-roller grading-guide consists of a sheet of metal or other substance bent to the proper curve and having slots to permit of adjusting its vertical position; also, having rigidly attached to its bottom edge a rod of similar curve, upon which rod is loosely journaled a series of rings or washers of metal or other substance which revolve freely as the fruit passes in contact with them; in conjunction with these a table suitably constructed for supporting and operating the rotating disk or ring and for holding in position the adjustable curved-roller grading-guides; also, a feed-chute through which the fruit is delivered to the rotating disk or ring and means for catching the fruit as it drops from its proper opening.

Referring to the accompanying drawings, Figure 1 is a plan view of my grader. Fig. 2 is a vertical section of the same on line *xx* of

Fig. 1. Fig. 3 is a similar view showing a ro-

tating disk. Fig. 4 is a detail view of one of the guide-plates.

The fruit is first placed in a feed-chute A, having a bottom formed of longitudinal strips or grate-bars and a sufficient inclination so that the fruit will roll down over these bars. From the lower end of the chute the fruit is delivered upon a disk or ring 3, having inclined or beveled edges. If a disk with an exterior beveled edge is used, it is surrounded by an exterior adjustable guide; but if a ring is used it has double inclines in the form of a circular roof-shaped bottom 3, the apex of which is approximately central between the outer and inner guides which form the channel, in the lower part of which the ring is supported and turnable. The fruit received upon the ring or disk then lies upon the beveled surface or surfaces and against the exterior guide or guides, and is thus advanced and rotated by the revolution of the disk or ring, as hereinafter described.

The disk or ring 3 is supported upon and guided by roller-bearings, as at 5, and it is revoluble by any suitable mechanism. Such mechanism I have here illustrated in the form of a frictional roller 6, which contacts with the ring or with a rib 4 thereon, and which roller is turnable by a shaft, as at 7. The sides or guides against which the fruit rests are here shown in the form of sectional plates 8, which are slotted, as shown at 9, so that they may be adjusted vertically to project more or less below the supports 2, from which they are hung, being held in place by thumb-screws or equivalent devices, as at 10. It will also be manifest that the plates could be supported from vertical posts, to which the ends of the plates could be adjustably connected. These plates 8 are preferably set so as to form vertical offsets between each plate and the next one, so that the spaces from the point where the fruit enters the apparatus gradually increase around the circle, so that oranges or similar fruit rolling along on the beveled edges of the disk or ring will rest against the lower edges of the plate or a series of rollers to be hereinafter described, which extend along these edges and will be moved along in contact with these rollers un-

til they reach a place where the space is of sufficient width to allow them to drop through. Each of these spaces beneath the adjustable plates communicates through a directing chute or receptacle, so that fruit which has passed through may be received and kept separate from the other fruit. Around the lower edges of these adjustable plates are curved shafts or rods, as at 11, supported by suitable brackets, so that they are raised and lowered with the plates. Upon these rods are loosely fitted a series of disks 12, which are freely turnable upon their rods and which form a continuous contact for the sides of the fruit, which resting upon the inclined bottom surfaces will also contact against these loose rings or disks. The movement of the bottom 3, which is caused to travel around in this circular channel, and the contact of the fruit with these rings produces a revolving motion of the fruit, which while being carried forward by the moving bottom revolves backwardly and upwardly, and the disks or rings are acted upon by the revolving fruit and caused to rotate upon their supporting-rods. This provides a contact-surface for the fruit which is freely movable, and which revolving in the opposite direction or upwardly prevents the fruit from being pinched when it arrives at spaces which are nearly large enough to allow it to pass, and it will thus be retained in the channel until it arrives at a space which is sufficiently large for it to fall through. The gradation of these spaces may be regulated by the adjustment of the plates 8, so that the offsets from one to another may be of any desired size.

In order to regulate the delivery of the fruit from the chute A and to distribute it evenly upon each side of the apex of the bottom 3, I have shown a directing-board 13, which is mounted in the discharge end of the chute and bent as shown, so that the oranges or other fruit will be divided by it and delivered into the channel upon each side of the bottom 3, and by its construction and arrangement they will be delivered singly, so so as to prevent their crowding or piling upon each other.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, in a fruit-grader, of a ring or disk forming a bottom and having beveled or sloping edges, means for rotating the disk, vertical guides surrounding and extending above said edges, and means whereby the lower edges of the guides are vertically adjusted toward and from the edges of the disk to regulate the size of the fruit-discharge.

2. A fruit-grading apparatus consisting of a revoluble ring or disk having beveled or inclined edges upon which the fruit rests, vertical surrounding contact-surfaces for the fruit consisting of slotted adjustable plates above said ring or disk, and means for secur-

ing said plates whereby the spaces between the ring or disk and the lower edges of the plates may be regulated.

3. A fruit-grader consisting of a horizontally-revoluble disk or ring having a beveled or inclined edge or surface upon which the fruit rests while being advanced, and guides surrounding and extending above said beveled surface, said guides having the lower edges provided with a series of loosely-turnable disks or rollers forming contact-surfaces against which the fruit rests.

4. A fruit-grader, consisting of a disk or ring having a beveled edge or edges, forming a surface or support for the fruit, and vertical guides against which the fruit bears, said guides consisting of vertically-adjustable plates concentric with the disk or ring, having a series of journaled disks revoluble in radial planes around their lower edges.

5. A fruit-grader consisting of a horizontally-revoluble disk or ring having a beveled upper edge or edges upon which the fruit rests, curved slotted plates concentric with the periphery of the disk or ring having radially-revoluble rollers journaled upon their lower edges forming contact-surfaces for the fruit, and means engaging the slots in the plates by which said plates are vertically adjusted with relation to the horizontal disk or ring so as to form a series of spaces, increasing in width from the point where the fruit is received around the circle whereby different sizes of fruit are allowed to escape through said spaces during their advance.

6. The combination in a fruit-grading apparatus of a horizontally-revoluble disk or bottom having a beveled or inclined edge forming a surface upon which the fruit rests, a series of vertically-adjustable concentrically-disposed guides having rollers journaled and turnable upon their lower edges, against which rollers the fruit also rests while advancing, said guides forming, in conjunction with the revoluble disk or ring, a series of gradually-increasing spaces through which the different sizes of fruit escape as they arrive.

7. The combination in a fruit-grading apparatus of a horizontally-revoluble disk or ring having a beveled edge or edges forming a supporting-surface for the fruit, adjacent concentrically-curved plates having revoluble rollers journaled around their lower edges, between which rollers and the disk the fruit also rests, means by which said plates are vertically adjusted to present spaces of gradually-increasing diameter between the rollers and the supporting edges of the disk or ring, and chutes or receptacles into which each grade of fruit thus escaping is received.

8. The combination in a fruit-grading apparatus of a horizontally-revoluble disk or ring having a beveled edge or edges forming a supporting-surface for the fruit, adjacent concentrically-curved plates having revol-

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3

ble rollers journaled around their lower edges, between which rollers and the disk the fruit also rests, means by which said plates are vertically adjusted to present spaces of gradually-increasing diameter between the rollers and the supporting edges of the disk or ring, chutes or receptacles into which each grade of fruit thus escaping is received, and a supply-chute and regulating and directing gate

by which the fruit is separated and delivered singly upon the beveled surface or surfaces. In witness whereof I have hereunto set my hand.

RICHARD G. BAILEY.

Witnesses:

S. H. NOURSE,

CHAS. E. TOWNSEND.

548

Fred Stebler vs.

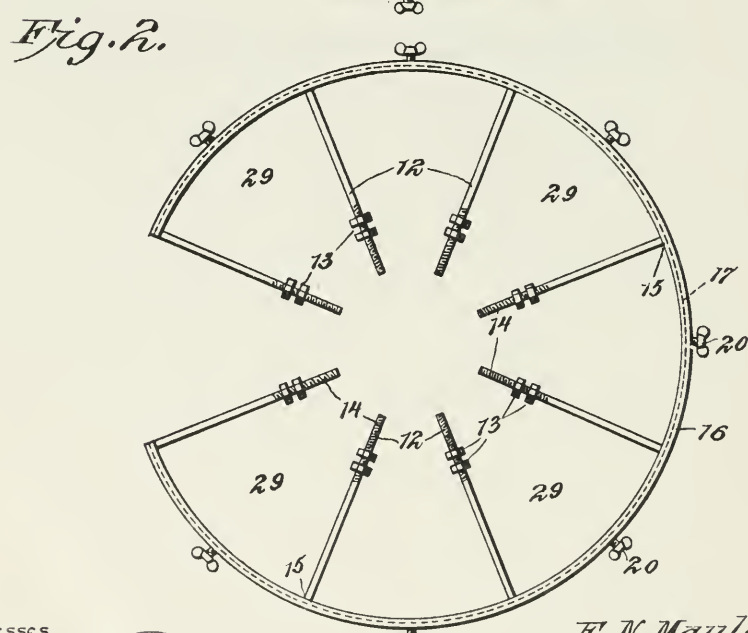
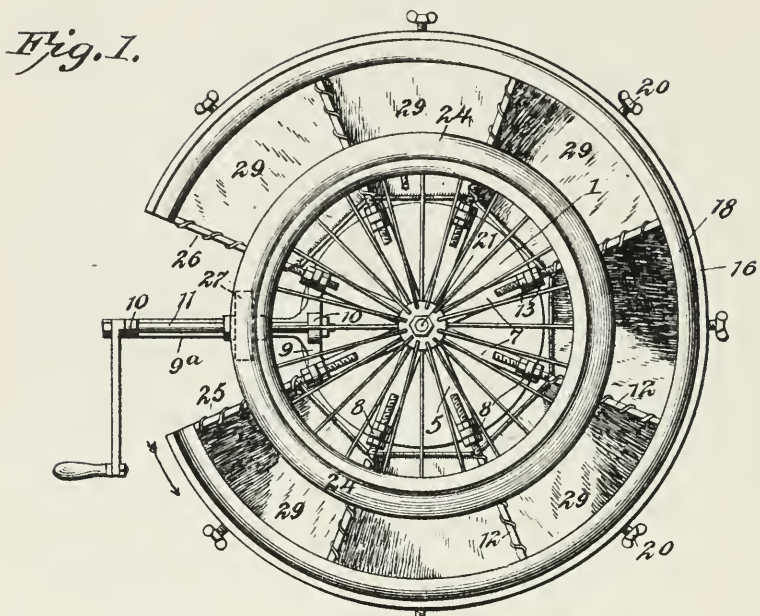
[Defendants' Exhibit "Maul Patent."]

E. N. MAULL.
FRUIT SORTING MACHINE.

(Application filed July 9, 1900.)

(No Model.)

2 Sheets—Sheet 1.



Witnesses

Howard N. Orr. By *his* Attorneys,

J. W. Gama

E. N. Maull, Inventor.

C. A. Snow & Co.



E. N. MAULL.
FRUIT SORTING MACHINE.

(Application filed July 9, 1900.)

(No Model.)

2 Sheets—Sheet 2.

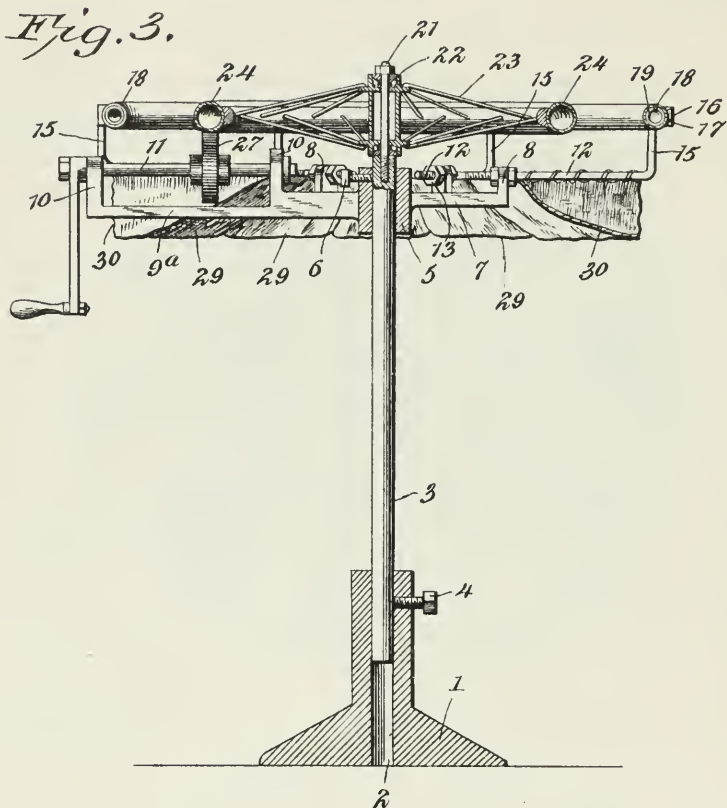


Fig. 4.

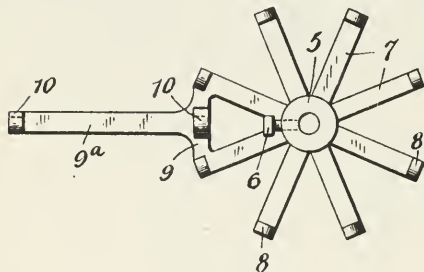
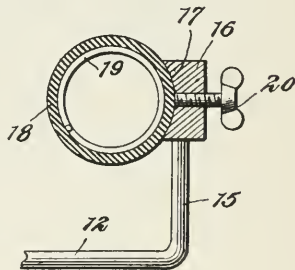


Fig. 5.



Witnesses

Howard D. Orr,

J. Garner

By his Attorneys,

E. N. Maull, Inventor.

C. Snow & Co.

UNITED STATES PATENT OFFICE.

EDWARD N. MAULL, OF CRESCENT CITY, FLORIDA, ASSIGNOR OF ONE-HALF TO JOHN W. MILLER, OF SAME PLACE.

FRUIT-SORTING MACHINE.

SPECIFICATION forming part of Letters Patent No. 673,127, dated April 30, 1901.

Application filed July 9, 1900. Serial No. 23,022. (No model.)

To all whom it may concern:

Be it known that I, EDWARD N. MAULL, a citizen of the United States, residing at Crescent City, in the county of Putnam and State of Florida, have invented a new and useful Fruit-Sorting Machine, of which the following is a specification.

My invention is an improved fruit-sorting machine, its object being to provide a fruit-sorter which is adapted to sort fruit according to size and to deliver the same without injury into spouts or receptacles for the different sizes of fruit.

My invention consists in the peculiar construction and combination of devices hereinafter fully set forth, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a top plan view of a fruit-sorter embodying my improvements. Fig. 2 is a detail top plan view of the volute gage and its radially-adjustable sorting-arms. Fig. 3 is a vertical central sectional view of my improved fruit-sorter, taken in line with the crank-shaft thereof. Fig. 4 is a detail top plan view of the spider. Fig. 5 is a detail transverse sectional view through one side of the volute gage.

The supporting-base 1, which is adapted to be secured on a floor, is provided with a vertical central opening 2, in which is the lower end of a supporting-standard 3, which is adapted to be adjusted vertically in the base and is secured at any desired adjustment by a set-screw 4. Near the upper end of the standard is secured a spider 5 by means of a set-screw 6, which passes through one side of its hub and engages with the standard. Said spider is provided with a series of radial arms 7 of suitable length, and at the outer end of each of the said arms is formed a lug or ear 8, in which is a horizontal opening. The outer ends of one pair of said radial arms are connected together by a web 9, from which extends a radial arm 9^a, provided on its upper side, at its outer and inner ends, with a pair of vertical standards 10, which form the bearings for the crank-shaft 11. As will be noted from the foregoing and by reference to the drawings, this spider may be very

cheaply constructed of iron cast in a single piece.

A series of radially-adjustable supporting-arms 12 are secured in the openings in the lugs 8 of the spider-arms by means of pairs of nuts 13, which are screwed on the threaded inner portions 14 of said supporting-arms 12, the said nuts bearing against opposite sides of said lugs of said spider-arms. The outer ends of the said supporting-arms 12 are upturned vertically at 15, and secured to the said upturned ends of said series of supporting-arms is the curved gage 16, which is preferably of volute form, but which may be circular in form. Said gage is of iron, steel, or other suitable material and has its inner side concave in form, as at 17.

18 represents a flexible guide, which is preferably made of rubber hose provided with an interior core 19, made of spirally-wound wire. Said guide may, however, be an air-inflated tube or otherwise suitably constructed. The said flexible guide bears against the said gage, in the concave side thereof, and is of the same form as the said gage, and the latter is provided with a series of adjusting thumb-nuts 20, which operate in threaded openings in the gage and have their inner ends bearing against the outer sides of the said flexible guide. By means of this construction the said guide may be adjusted at any point within the gage, and by means of the adjustable sorting-arms 12 the gage may be adjusted to any desired curved form from the spider.

In the upper end of the vertical standard 3 is screwed the lower end of a vertical axle or spindle 21, having the ball-bearings 22, in which is mounted a revoluble wheel 23, which, as here shown and preferably, is an ordinary bicycle-wheel provided with an air-inflated or pneumatic tire 24. As will be observed by reference to Fig. 1, this wheel is mounted eccentrically within the curved gage and the runway formed between the tire of the wheel, and the opposing guide 18 widens progressively in the direction of the arrow in Fig. 1 from the inner end 25 to the outer end 26 of said runway.

On the crank-shaft 11 is keyed a frictional wheel 27, which bears against the under side

of the tire of the wheel and is adapted to communicate rotary motion to said wheel when said shaft 11 is turned by its crank 28. The runway is divided into a series of ports 29 of progressively-greater width by the supporting-arms 12, and said supporting-arms are connected together in pairs by a series of cloth or other suitable spouts or receptacles 30, as shown, adapted to receive the fruit, which is assorted in its passage through the runway, the smallest size fruit passing into the first of said receptacles or spouts, the next size fruit into the next of said receptacles or spouts, and so on throughout the series.

In the operation of my improved fruit-sorter the fruit is fed by any suitable device or by hand, as the case may be, to the inner end of the runway, and the rotation of the inner wheel causes the fruit to be carried in said runway until it reaches a point where the width of the runway is greater than its own diameter, whereupon it falls into one of the spouts or receptacles.

By having the guide 18 flexible and providing it with means, as hereinbefore described, whereby it may be adjusted in the volute gage the shape of the outer side of the gage may be slightly modified to meet the requirements of varying conditions and adapt the machine to be used for assorting various kinds of fruit. The pneumatic tire 24 being flexible and yielding the same will yield slightly, as may be required to permit the escape of the fruit when of other than spherical form or when irregular in shape from the runway without injury to such fruit. Furthermore, the said pneumatic tire 24 serves not only as an elastic surface for the inner moving side of the runway, but also constitutes a yielding frictional surface for contact with the friction-wheel 27 on the crank-shaft.

A fruit-sorter thus constructed is exceedingly cheap and simple, is adapted to be operated by a very slight expenditure of power, is thoroughly efficient, is not likely to get out of order, and can be adjusted and adapted to sort various kinds of fruit.

Having thus described my invention, I claim—

1. In a fruit-sorter, the combination of a relatively-fixed curved guide, a revoluble wheel arranged within said guide and eccen-

trically with relation thereto, said wheel and guide forming a runway between them, a bearing for said wheel, and means to rotate said wheel, and means to support and adjust said curved guide, substantially as described. 55

2. A fruit-sorter having a curved gage and the revoluble wheel arranged eccentrically with relation thereto, said wheel and gage forming a guide-runway between them, one of the sides of said guide-runway having an air-inflated yielding contacting surface, substantially as described. 60

3. In a fruit-sorter, the combination with the curved outer gage forming one side of the runway, of the wheel mounted eccentrically within said gage and having the air-inflated or elastic tire, said tire forming the inner side of the runway, and the friction-wheel bearing against said tire and means to rotate said friction-wheel, substantially as described. 65

4. In a fruit-sorter, the combination with the inner revoluble wheel, of the volute-gage frame without said wheel and having the adjustable guide on its inner side, for the purpose set forth, substantially as described. 70

5. In a fruit-sorter, the combination with the inner revoluble wheel, of the volute-gage frame without said wheel and having the adjustable guide on its inner side, said guide comprising the elastic tube, substantially as described. 75

6. The combination, in a fruit-sorter, of the standard, the spider, the adjusting-arms on said spider, the volute gage supported by the said arms, the inner wheel on said standard, and devices to rotate said wheel, substantially as described. 80

7. In a fruit-sorter, the combination of the inner revoluble wheel having the elastic tire, the curved elastic guide without and eccentric to said wheel, said wheel and guide forming a runway between them, and said guide having the series of supporting-arms, and the series of flexible spouts or receptacles supported by said supporting-arms under said runway, substantially as described. 85

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses. 90

EDWARD N. MAULL.

Witnesses:

B. F. WATTS,
P. C. SMITH.

Riverside Heights O. G. Assn. et al. 553

[Defendants' Exhibit "Nelson Patent."]

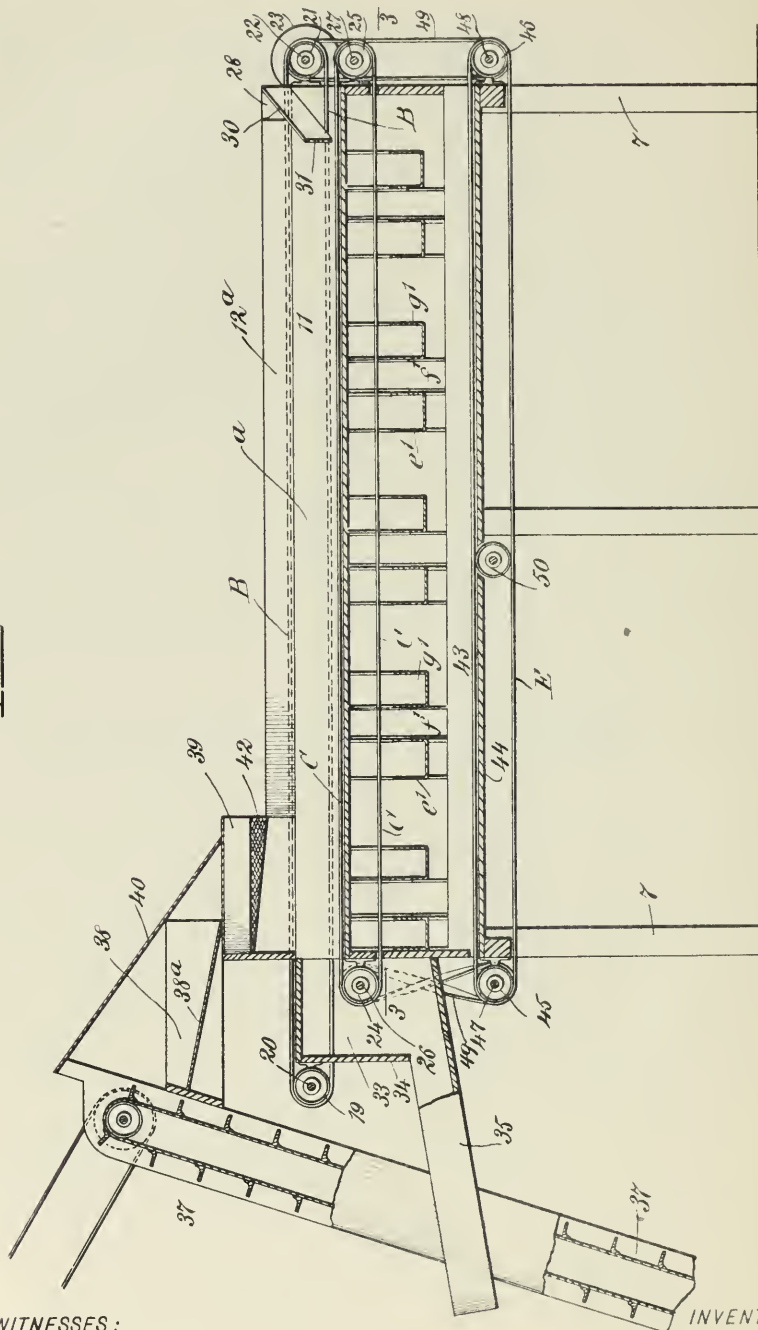
C. D. NELSON.
FRUIT ASSORTING TABLE.

(Application filed Feb. 15, 1902.)

(No Model.)

2 Sheets—Sheet I.

Fig. 1



WITNESSES:

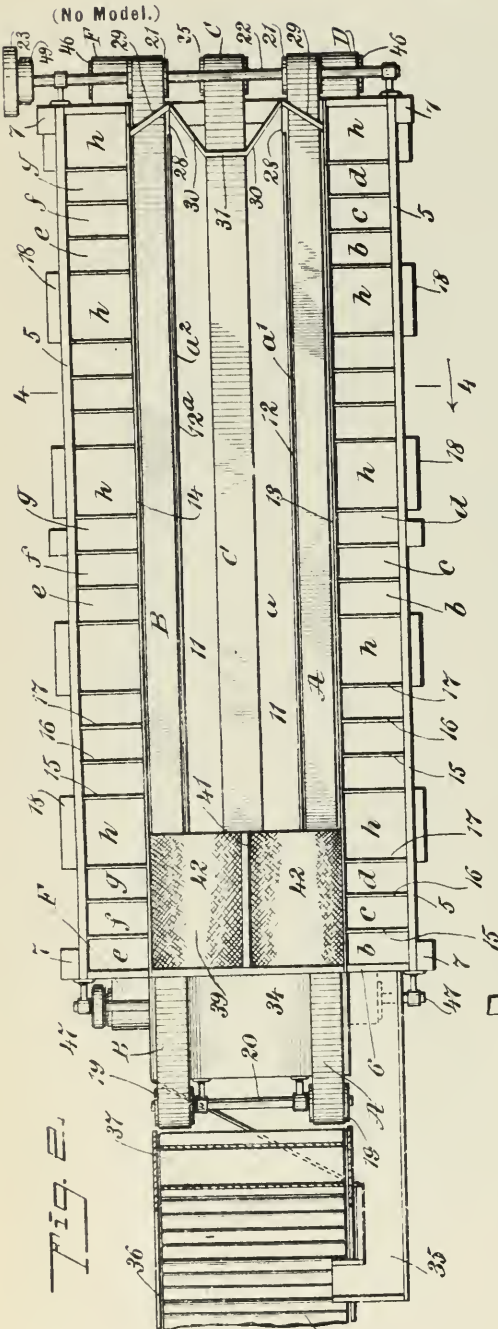
J. P. Propley
H. J. Bernhart

INVENTOR
Clinton D. Nelson
 BY *Munn*
 ATTORNEYS

C. D. NELSON.
FRUIT ASSORTING TABLE.

(Application filed Feb. 15, 1902.)

2 Sheets Sheet 2.



(No Model.)

FIG. 1.

WITNESSES:

J. S. Propoy
H. J. Berchard

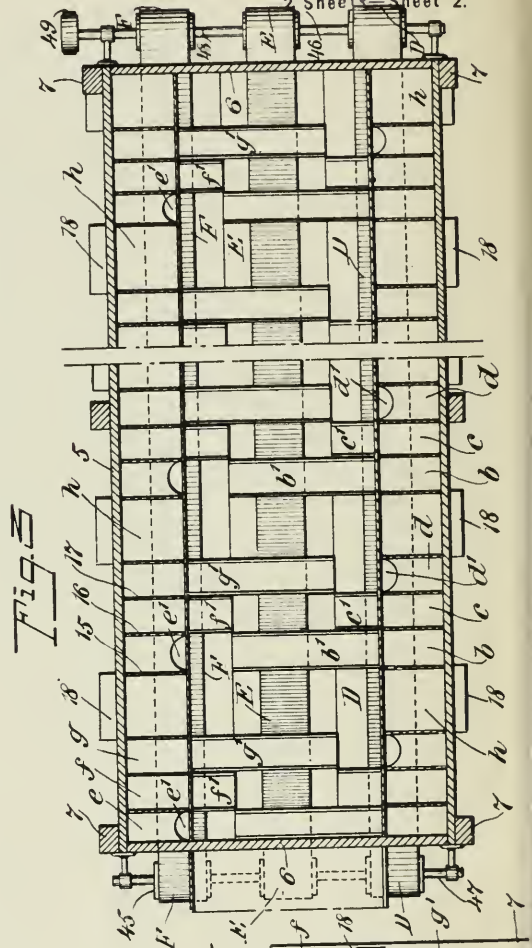


FIG. 2.

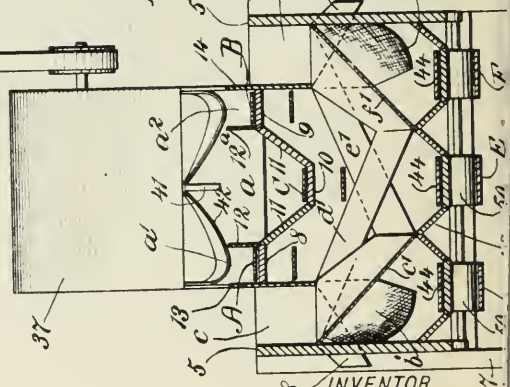


FIG. 3.

INVENTOR
Clinton D. Nelson
BY *Munn*
ATTORNEYS

CLINTON D. NELSON, OF SAN DIMAS, CALIFORNIA.

FRUIT-ASSORTING TABLE.

SPECIFICATION forming part of Letters Patent No. 713,484, dated November 11, 1902.

Application filed February 15, 1902. Serial No. 94,205. (No model.)

To all whom it may concern:

Be it known that I, CLINTON D. NELSON, a citizen of the United States, and a resident of San Dimas, in the county of Los Angeles and State of California, have invented new and useful Improvements in Fruit-Assorting Tables, of which the following is a full, clear, and exact description.

My invention relates to improvements in fruit-assorting tables, more especially designed as a means for grading oranges and lemons according to different qualities, although it is evident that other kinds of fruit may be subjected to treatment in the machine.

It is now the common practice to assort oranges and lemons into at least three distinct grades for commercial use, known, respectively, as "fancy," "choice," and "standard."

The object of the present invention is the provision of a compact simple machine adapted to allow the desired grading of the fruit and to enable operators to be stationed on both sides of the apparatus.

A further object is to automatically return to the place of supply all the fruit which may not be picked out by the assorting attendants and which may pass through the machine from end to end thereof in case the supply of fruit is so rapid or great that the attendants cannot assort it all.

With these ends in view the invention consists in the novel combination, construction, and arrangement of parts, which will be hereinafter fully described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a vertical longitudinal section taken centrally through a fruit-assorting table constructed in accordance with my invention. Fig. 2 is a plan view thereof. Fig. 3 is a horizontal sectional view, the plane of the section being indicated by the dotted line 3 3 in Fig. 1; and Fig. 4 is a vertical transverse section in the plane of the dotted line 4 4 in Fig. 2.

In carrying my invention into practice I employ a suitable supporting-frame consisting of the side pieces 5 and the cross-pieces 6, and this frame is sustained in an elevated

position, convenient to the picking attendants, by the legs 7.

Arranged longitudinally in the upper part of the supporting-frame is a false bottom consisting of the side pieces 8 9, the central piece 10, and the inclined intermediate pieces 11. (see Fig. 4,) said intermediate pieces extending on converging lines from the side pieces 8 9 to the central piece 10. Within this false bottom are arranged the vertical strips 12 12^a, arranged to extend upward from the side pieces 8 9, and these upstanding pieces 12 12^a, in conjunction with the inclined pieces 11 and the central piece 10, form a longitudinal chute, which is indicated in its entirety by the reference-letter *a*.

On opposite sides of the longitudinal chute are arranged the partitions 13 14, which lie parallel to the sides 5 of the frame and the upstanding walls 12 12^a of the chute, and the spaces between these partitions 13 14 and the side walls 5 are divided by the transverse partitions 15 16 17, thereby forming groups of pockets at the sides of the supporting-frame. One series of pockets on one side of the supporting-frame are indicated by *b*, *c*, and *d*, while another series of pockets on the opposite side of the frame are indicated by *e*, *f*, and *g*. These two series of pockets *b* to *g*, inclusive, constitute a group, and a number of these groups are provided throughout the length of the machine. Between the partitions 15 and 17 of each series of three pockets there is provided a larger pocket *h*, from which leads a discharge-chute 18, the same extending through one side of the machine-frame and arranged to discharge the culled and imperfect fruit into suitable receptacles.

The spaces inclosed between or bounded by the walls 12 12^a 13 14 and the bottom pieces 8 9 form a pair of feed-channels, (indicated by the reference-letters *a'* *a*²;) said feed-channels being located on opposite sides of the central chute, which, in effect, forms the return-chute *a*. These feed-channels are located within the series of assorting-pockets at the sides of the machine, and the fruit to be picked and assorted is conveyed through the feed-channels *a'* *a*² by any suitable means—as, for example, by the conveyers A B. Each conveyer is in the form of an endless apron or belt arranged longitudinally within the

frame, so that the upper lead of the apron will extend through the feed-channel; but other desired forms of conveyers may be employed. The conveyers extend the full length of the machine, and at the head or inlet end of the frame said conveyers are fitted to the pulleys 19, which are mounted on the shaft 20. The opposite ends of the conveyers A B are fitted to the pulleys 21 on the shaft 22, and this shaft 22 is provided with the driving-pulley 23, adapted to be propelled by a belt from any suitable source of power.

C indicates the return-conveyer, also in the form of an endless apron or belt and arranged longitudinally of the machine. This return-conveyer has its upper lead arranged to travel close to the bottom strip 10, and the opposite end portions of this return-conveyer are fitted to pulleys 24 25 on the shafts 26 27, respectively, said shafts being journaled at opposite ends of the machine-frame and the shaft 27 being belted or geared to the shaft 22, so that the conveyer C will be driven or propelled in an opposite direction to the conveyers A B. The purpose of this conveyer C is to transport the surplus fruit which may be fed or supplied to the machine back to the place of inlet in case the operators stationed at both sides of the machine cannot work fast enough to pick and assort the fruit transported by the feed-conveyers A B. The partitions 13 14 are provided at the foot or rear end of the machine with the escape-openings 28, thus making provision for communication between the feed-channels a' a^2 and the return-chute a . Across the feed-channels at the foot end of the machine are disposed the inclined deflectors 29, which extend across the feed-conveyers A B and terminate at the escape-openings 28. Reversely-inclined deflectors 30 meet or intersect with the first-named deflectors 29, and said deflectors 30 are joined by the bridge 31, so that the surplus fruit on the conveyers A B which strikes the deflectors 29 30 will be discharged into the chute a , whereby the surplus fruit will lodge upon the return-conveyer C and be carried through the chute a in an opposite direction. The return-conveyer C delivers the fruit thereon into a chamber 33, which is formed by a boxing or casing 34, having an inclined trough 35, the latter being arranged to discharge its contents back into the feed-receptacle 36, from which the fruit is taken by suitable elevator mechanism, (indicated at 37.) The fruit is discharged from the elevator into an elevated-box 38, which in turn discharges it into a second box 39, the latter being disposed below the box 38. Over the two boxes is an inclined hood 40, which prevents the fruit from escaping from the boxes. The box 38 has an inclined bottom 38^a, of a suitable fibrous material, arranged to deliver the fruit to the box 39. Said last-mentioned box is divided by a vertical partition 41 into separate compartments, and the bottom 42 of said box 39 is fibrous and loosely suspended over the parti-

tion 41, whereby the fibrous inclined bottom 42 may form short chutes arranged to discharge the fruit into the feed-channels a' a^2 , 70 as more clearly represented by Fig. 4.

A series of inclined division-walls 43 is arranged in a horizontal plane below the return-chute a , the groups of assorting-pockets, and the feed-channels. (See Fig. 4.) These division-walls are inclined toward the horizontal strips 44, a series of three of which are provided in spaced longitudinal relation, so as to extend longitudinally of the frame at the bottom part thereof, one of said strips 44 lying below the series of assorting-pockets on one side of the machine, another strip 44 below the pockets on the opposite side of the machine, and the middle strip 44 substantially below the return-chute a at the center of the machine. A series of discharge-conveyers D E F are arranged longitudinally of the machine, so as to have the upper leads of said conveyers travel over the strips 44, the conveyers traveling in the same directions of the feed-conveyers A B. These discharge-conveyers are supported by the pulleys 45 46 on the shafts 47 48, provided at opposite ends of the machine, and the shaft 47 is driven by a crossed belt 49 or other gearing from the shaft 26, whereby the entire series of discharge-conveyers is driven from a common source of power. Idle rollers or pulleys 50 are arranged at points intermediate of the length of the discharge-conveyers to prevent the latter from sagging. (See Fig. 1.)

From the foregoing description, taken in connection with the drawings, it will be seen that I have provided six grading-pockets in each group and that three delivery-conveyers are provided in the machine. It is intended that three of the pockets shall be arranged on one side of the machine, a like number on the opposite side of the machine, and that two attendants shall be stationed on opposite sides of the machine and adjacent to each series of three pockets. The attendants pick out the fruit according to the quality thereof by removing said fruit from the conveyers A B, and fruit of one quality is placed in the pockets b or e , another quality of fruit is deposited in the pockets c and f , and the third quality of fruit in the pockets d and g . One of the peculiarities of my invention resides in an arrangement of spouts whereby corresponding pockets on opposite sides of the machine and in the same group may discharge to the same conveyer. The pocket b of each group is provided with a short spout b' , arranged to discharge to the conveyer D, and to this same conveyer is arranged to discharge the long spout e' of the corresponding oppositely-placed pocket e . The pockets $c f$ are provided with the spouts $c' f'$, which extend inwardly below the false bottom forming the chute a , so that the spouts $c' f'$ will both discharge to the delivery-conveyer E. The pocket g has a short depending spout g' , that discharges to the conveyer F, while the cor-

responding pocket *d* on the opposite side of the machine has a long spout *d'*, arranged to extend across the machine and discharge to the same conveyer F, all as more clearly shown by Fig. 4.

It will be seen that the parts of the machine are very compactly arranged, so as to allow two rows of operators to be stationed on opposite sides of the machine, and the pair of facing operators pick off the fruit supplied to the machine by the conveyers A B. Fruit of one quality placed in the pockets *b* and *e* is delivered from the rear end of the machine by the conveyer D, while fruit of another quality placed in the pockets *c* and *f* is discharged by the conveyer E, and finally fruit of still another quality deposited in the pockets *d* and *g* is discharged by the conveyer F.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A fruit-assorting table provided with a feed-channel, assorting-pockets adjacent to said feed-channel, and a return-channel arranged to carry the fruit in an opposite direction to the feed-channel, said return-channel communicating with the feed-channel at a point beyond the assorting-pockets.

2. A fruit-assorting table provided with parallel feed-channels, assorting-pockets adjacent to said feed-channels, and means for returning the surplus fruit to the source of supply.

3. A fruit-assorting table provided with a longitudinally-arranged feed-conveyer, assorting-pockets adjacent to said feed-conveyer, and a return-conveyer movable in an opposite direction to the feed-conveyer and arranged to receive a load therefrom at a point beyond the assorting-pockets.

4. A fruit-assorting table provided with parallel feed-channels each having a feed-conveyer, assorting-pockets adjacent to said feed-channels, a return-channel located between and having connection with said feed-channels, and a return-conveyer movable through the return-channel and in an opposite direction to the feed-conveyers.

5. A fruit-assorting table provided with a feed-channel, assorting-pockets adjacent thereto, a return-channel, and means for deflecting fruit from the feed-channel into the return-channel at a point beyond the assorting-pockets.

6. A fruit-assorting table provided with feed-conveyers, a return-conveyer located between said feed-conveyers, assorting-pockets arranged in series adjacent to the feed-conveyers, and reversely-arranged deflectors disposed across the feed-conveyers and in the path of the loads thereon to change the course of the latter toward the return-conveyer.

7. A fruit-assorting table provided with feed channels, and an intermediate return-channel conveyers movable in said feed-

channels, deflectors in operative relation to the conveyers and adapted to direct the surplus fruit into the return-channel, and means for carrying the fruit through said return-channel.

8. A fruit-assorting table provided with feed-channels at the sides of the table, a return-channel between the feed-channels, groups of assorting-pockets disposed adjacent to the feed-channels and each having spouts extending below the return-channel, and a series of delivery-conveyers below the feed and return channels, and each arranged to receive the contents of two of said pockets of each group.

9. A fruit-assorting table provided with feed-conveyers at the sides of said table, a return-conveyer between and movable in an opposite direction to the feed-conveyers, a series of delivery-conveyers below the feed and return conveyers, and groups of assorting-pockets adjacent to the feed-conveyers, two pockets of each group on opposite sides of the table being arranged to deliver their contents to one delivery-conveyer.

10. A fruit-assorting table provided with feed-conveyers at the sides of said table, a return-conveyer between said feed-conveyers, groups of assorting-pockets having members disposed on opposite sides of the feed-conveyers, and delivery-conveyers disposed below the feed and return conveyers, each delivery-conveyer having communication with two pockets of each group.

11. A fruit-grading table provided with longitudinal feed-conveyers arranged at the sides of said table, a return-conveyer situated between and movable in opposite direction to the feed-conveyers, assorting-pockets adjacent to the feed-conveyers, a divided receptacle disposed above the feed-conveyers and having their bottoms arranged to deliver the load to said feed-conveyers, and means for supplying a load to said elevated receptacle.

12. A fruit-assorting table provided with feed-channels and an intermediate return-channel, feed-conveyers arranged in the feed-channel, a return-conveyer movable in the return-channel and in an opposite direction to the feed-conveyers, a series of delivery-conveyers arranged below the feed and return conveyers and movable in the same direction as the feed-conveyers, and assorting-pockets disposed at the sides of the table adjacent to the feed-conveyers and having spouts arranged to extend beneath the return-conveyer and to discharge the load upon the series of delivery-conveyers.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CLINTON D. NELSON.

Witnesses:
W. A. JOHNSTONE,
E. M. WHEELER.

70
75
80
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95
100
105
110
115
120

**[Defendants' Exhibit "File-Wrapper Rayburn
Application for Letters Patent."]**

2-390.

UNITED STATES OF AMERICA.
DEPARTMENT OF THE INTERIOR.
UNITED STATES PATENT OFFICE.

To All to Whom These Presents Shall Come, Greeting:

THIS IS TO CERTIFY THAT the annexed is a true copy from the Records of this Office of the File Wrapper and Contents in the matter of the

Letters Patent of

Charles Rayburn,

Number 726,756,

Granted April 28, 1903

for

Improvement in Fruit Graders.

IN TESTIMONY WHEREOF I have hereunto set my hand and caused the seal of the Patent Office to be affixed at the City of Washington, this 24th day of May, in the year of our Lord one thousand nine hundred and twelve and of the Independence of the United States of America the one hundred and thirty-sixth.

[Seal]

F. A. TENNANT,

Acting Commissioner of Patents.

(Endorsed.) [575]

Patented April 28, 1903
Associate Attorney Attorney, H. B. Willson & Co.,
Issue Div. City.

Name Serial Number.....

Patent No..... Date of Patent.....

Power to Inspect

3 to

Ellis Spear and L. W. Seely,
City and San Francisco, Cal. [576]

AMOUNT RECEIVED	21, 1901.	RECEIVED
\$15.00.	RECEIVED NOV.	DEC. 24, 1901.
CHIEF CLERK.	H. B. WILLSON & CO.	H. B. WILLSON & CO.
SRM.		
	RECEIVED JAN.	
	14, 1902.	
	H. B. WILLSON & CO.	

Serial No. 120,131 Paper No. 1/2
APPLICATION

Petition.

To the Honorable Commissioner of Patents:

Your petitioner Charles Rayburn, a citizen of the United States, residing at Visalia (P. O. the same), in the County of Tularo, State of California, prays that Letters Patent may be granted to him for improvements in "Fruit Graders" as set forth in the annexed specification, and he hereby appoints the firm of H. B. WILLSON & CO., of WASHINGTON, D. C., (Composed of H. B. Willson), his attorneys, with full power of substitution and revocation, to prosecute this application, to make alterations and amendments therein, to sign the drawings, to receive the patent, and to transact all

business in the Patent Office connected therewith.

Signed at Visalia in the County of Tulare, State of California, this 14th day of December, 1901.

CHARLES RAYBURN.

SPECIFICATION.

To All Whom it may Concern:

Be it known, That I, Charles Rayburn, a citizen of the United States, residing at Visalia in the County of Tularo, and State of California, have invented certain new and useful improvements in "Fruit Graders," and I do declare the following to be a full, clear and exact description of the invention, such as will enable others skilled in the art to which it appertains, to make and use the same.

[577]

Charles Rayburn.

This invention relates to improvements in machines for sizing or grading oranges or other fruit, that is, separating the fruit into lots, all the fruit in each lot being essentially of the same dimensions of size.

The most efficient machine now in use for sizing oranges and similarly-shaped fruit embodies continuous graduated rollers whose separating surfaces or sections have a fixed relation, so that the sections cannot be independently adjusted for fine grading, nor varied for this purpose without wrapping those surfaces which it is desired to change with paper or other material to enable the sizes of the discharge spaces or apertures formed by some of the surfaces

to be varied without varying the spaces or apertures formed by the remaining surfaces.

The object of my invention is to obviate this difficulty by the provision of a series of rolls which are adjustable independently of one another, so that any of the number of discharge spaces or apertures may be varied as to size with the utmost nicety, without varying the sizes of the others.

With this and other objects in view, which will appear as the nature of the invention is better understood, the same consists in certain novel features of construction, combination [578] and arrangement of parts as will be herein after more fully described and particularly pointed out in the appended claims.

In the accompanying drawings:

Figure 1 is a top plan view of a fruit sizer embodying my invention, a portion of the frame being broken away to expose the construction.

Figure 2 is a side elevation of the same.

Dec. 18/02. Figure 3 is a longitudinal section ^{substantially} on the line 2-2 of figure 1. ^

Figure 4 is a cross-section on the line 3-3 of figure 1.

Figure 5 is a detail view of one of the grooved rollers and its supports.

Figure 6 is a view showing a modification in the roller supporting and adjusting means.

Figure 7 is a similar view showing a further modification.

The numeral 1 in the drawings represents the frame of the machine, in the upper portion of which are journaled longitudinal parallel shafts 2 and 3, which are located on opposite sides of the center of said frame, and 4 and 5 represent transverse shafts located at the ends of the frame. The shaft 4 receives motion from any suitable source of power and drives the shafts 2 and 3 through the medium of the connecting belts 6 and 7.

The fruit sizing or grading devices are arranged below and between the shafts 2 and 3 and consists, in the specific [579] construction shown, of a center piece or divider 8 and two longitudinal, parallel series of rolls 9 and 10, although, if desired, but a single series of rolls may be used in connection with the center piece, in which case the driving mechanism will be accordingly modified. Belts 11, travelling in grooves in the center piece or divider and passing around grooved wheels 12 and 13 on the shafts 4 and 5, are provided for feeding the fruit through the machine and over and along the sizing devices in the usual manner. The rolls 9 are driven by belts 14 from the shaft 2, and the rolls 10 by corresponding belts 15 from the shaft 3.

As shown, the rolls of each series extend end-to-end and parallel with the center piece 8 and are independently mounted, each being journaled at its ends in brackets 16 adjustably secured to the frame so that it may be adjusted toward and from said center piece independently of the other rolls. The distance between the rolls of each series and the center piece

increases progressively from one to the other end of the machine, forming apertures for the discharge of the fruit, and, by adjustably mounting the rolls independently of one another, it will be seen that the discharge aperture for each grade of fruit formed between each roll and the center piece may be quickly and conveniently varied to change the size of the aperture, as desired, thus securing a nicety of adjustment of each roll without the necessity of varying the position of any other roll. Hence the sizes of the discharge apertures formed by some of the rolls may be varied without varying the apertures formed by the remaining rolls. The operation of the rolls in forcing the fruit through the proper apertures will be readily understood by those conversant with the art. [580]

The means employed for effecting the adjustment of the brackets may of course have a wide range of variation in form, construction and mode of application. In figure 1 to 5 inclusive, I have shown one form of adjustment consisting in employing screws 17 carrying wing-nuts 18 for moving the brackets in one direction or the other to adjust the rolls independently with relation to the center piece 8, the brackets being held and guided by supports 19 projecting through slots

20 formed therein. In some cases I may couple each pair of brackets carrying each roll together, as by a bridge piece, and extend the screw from such bridge piece, so that both brackete may be simultaneously adjusted. In other cases I may couple the brackete of (the opposite companion rolls of the two series together by a right and left threaded screw, so as to be adjusted in unison. In figure 6 I have shown a modification in the

supporting and adjusting mechanism for the brackets, wherein each bracket is suspended from the top of the frame and is adjustable vertically and laterally of the frame through the medium of a hanger 21 and adjusting screw 22, each of which is threaded to receive a wing-nut 23, the hanger being adjustable in a slot 24 to permit of the lateral adjustment of the roll. In each case the roll is independently mounted and adjustable for the purpose set forth. The screw 22 may also have a lock nut 25.

In the form of adjusting means shown in figure 7, the screw 22 carries a wing-nut 26, which is swiveled in a bearing [581] Plate 27 secured to the side of the frame and by means of which the screw may be moved inward or outward to adjust the bracket as desired. I do not of course limit myself to either of these modes of adjustment, but reserve the right to employ any suitable adjusting means for the described purpose.

The fruit passing through the discharge apertures falls into the spouts 28, of which there are as many employed as there are discharge apertures. It will be noted that the rolls are positioned high enough to form no impediment to the free adjustment of the spouts below to receive the fruit.

The rolls may all be of the same size or different sizes, as desired.

Idlers 29 are provided for adjusting the belts 14 and 15 to compensate for the adjustment of the rolls and maintaining a desired tautness of the belts.

From the foregoing description, taken in connection with the accompanying drawings, it is thought that the construction, mode of operation, and advantages of the invention will be readily apparent without requiring an extended explanation.

Various changes in the form, proportion and the minor details of construction may be resorted to

without departing from the principle or sacrificing any of the advantages of this invention; and I therefore reserve to myself the right to make such changes as fairly fall within the scope thereof. [582]

Having thus described the invention, what is claimed and desired to be secured by letters-patent is:—

Sub. A
Dec/16/02

1. A fruit sizing machine having a series of sizing rolls independently adjustable to regulate the size of the discharge apertures, substantially as described.
2. A fruit sizing machine having a series of sizing rolls, brackets carrying the rolls, and means for independently adjusting each bracket and roll, substantially as specified.
3. Fruit sizing mechanism comprising a relatively stationary member, a series of parallel sizing rolls, and means whereby each roll may be adjusted toward and from said stationary member independently of the other rolls, substantially as set forth.
4. Fruit sizing mechanism comprising a central member, parallel longitudinal rows arranged on opposite sides thereof, and means for independently adjusting the rolls, substantially as and for the purpose specified.
5. Fruit sizing mechanism comprising co-operating members, one of said members consisting of a series of rolls independently adjustable toward and from the other member, substantially as described.
6. Fruit sizing mechanism embodying a drive-shaft, co-operating sizing members, one consisting of a series of rolls independently adjustable toward and from the other member, belts connecting the shaft and rolls, and means for maintaining the requisite tautness of the belts, substantially in the manner set forth.

[583]

[584]

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

CHAS. RAYBURN.

JOHN CADOGAN.

WM. H. MOUSER.

OATH.

County of Tularo,
State of California,—ss.

See Oath
filed Jan.
10/03.

Charles Rayburn, the above named petitioner, being duly sworn, deposes and says that he is a citizen of the United States, and resident of Visalia, in the County of Tularo, State of California, and that he verily believes himself to be the original, first and sole inventor of the improvement in "Fruit Graders" described and claimed in the annexed specification; that he does not know and does not believe that the same was ever known or used before his invention or discovery thereof; or patented or described in any printed publication in any country before his invention or discovery thereof or more than two years prior to this application; or in public use or on sale in the United States for more than two years prior to this application, and that no application for patent on said improvement has been filed by him or his representatives or assigns in any country foreign to the United States, except as follows:

CHARLES RAYBURN.

Sworn to and subscribed before me, this 14th day of December, 1901.

[Seal] ISAAC T. BELL,
Notary Public in and for Tulare County, Cal.

[Endorsed]: MAIL ROOM AUG. 18, 1902. U.
S. PATENT OFFICE. [585]

2-260.

Div. ——— Room No. 243

Paper No. 1.

Address only

“The Commissioner of Patents,
Washington, D. C.”

All communications respecting this application should give the serial number, date of filing, and title of invention.

DEPARTMENT OF THE INTERIOR.

M. E. C.

UNITED STATES PATENT OFFICE.

Washington, D. C., Dec. 4, 1902.

Mailed “ “ “

Charles Rayburn,
Care H. B. Willson,
City.

Please find below a communication from the EX-AMINER in charge of your application #120,131, filed Aug. 18, 1902, for Fruit Graders.

E. B. MOORE,

Commissioner of Patents.

The cross section lines for figs. 3 and 4 do not appear in fig. 1.

instead of a grooved roller

Fig. 5 shows a plain roller as described. The numeral 1 should appear in figs. 1 and 2. The large grooved pulleys are numbered 12 and 13 in fig. 3, while really the pair 12 or the pair 13 shows. The

rods 17 should show in fig. 5. Lines 9 to 14, page 5, must be illustrated, or erased, new matter of course being avoided.

The new oath will be required under *ex parte* Branna, 97 O. G. 2533.

Claims 1, 2 and 3 are rejected as expressing no more than the transfer of the adjustment of the opening from one member to the other of 611,859, Dillman, Oct. 4, 1898. Threshing, Fruit and Vegetable Separators.

In claim 4 "rows," line 2, should be rolls.

Claims 4, 5 and 6 are rejected on 456,092, Hutchins, July 14, 1891, Threshing, Fruit and Vegetable Separators. That there is a lack of novelty in the application of a series of adjustable parts in the same plane and longitudinally disposed with respect to the other parts of the same series may be seen by examining 247,428, Stevens, Sept. 20, 1881, Fruit and Vegetable Separators.

See also 465,856, Hutchins, Dec. 29, 1891, same sub-class.

C. P. G.

A. McNAUGHT,
Act'g Examiner, Division XXV. [586]

PATENT OFFICE. Serial No. 120,131. Paper
DEC. 15, 1902. No. 2.

DIVISION XXV. Power to inspect and obtain
Photos of Drg's.
Filed Dec. 16, 1902.

SAN FRANCISCO, December 10th, 1902.

To the Commissioner of Patents,
Washington, D. C.

Sir:—

The undersigned is the inventor of an improvement in Fruit Graders, and applied for a patent through the Patent Agency of H. B. Willson & Co., of Washington, D. C.

He has been advised that his application was filed August 18th, 1902, under the serial number 120,131. Since the date of filing he has received no information whatever about the case, although he has made requests for such information, and he is not now advised or informed what is the condition of the case, whether it has been rejected or allowed, or if rejected, upon what prior patents.

In order, therefore, that he may obtain information as to the present condition of his case, he hereby authorizes Messrs. Spear & Seely (Ellis Spear and L. W. Seely) of San Francisco, California, and Washington, D. C., to apply to and procure from the Patent Office full and exact information as to the condition of said case. This authority, however, is not to permit the attorneys herein mentioned to take any action or make any amendment in said case, but is solely for the purpose of enabling the undersigned to obtain full and complete information as

to its condition and especially to obtain a photograph of the drawings.

C. R.

Respectfully,
CHARLES RAYBURN. [587]
Hi/W.

Serial No. 120,131, Paper No. 3.
Amendment A.
Filed Dec. 18, 1902.

PATENT OFFICE.

DEC. 18, 1902.

DIVISION XXV.

IN THE UNITED STATES PATENT OFFICE.

Charles Rayburn.

“Fruit Graders.”

Filed August 18, 1902.

Room 243.

Serial Number 120,131.

HON. COMMISSIONER OF PATENTS,

Sir:—

In re the above entitled application for patent, please amend as follows:

Page 3, line 8, after “section” insert—substantially—.

Page 4, line 19, after “machine,” insert a comma.

Page 5, cancel the matter beginning with “In”

15

line 9, and ending with “unison,” line 14.

Note: Applicant cancels the above matter with the understanding that he does not thereby disclaim the features of construction set forth therein, but reserves the right, as stated in lines 3, 4 and 5 of page

6, to employ any suitable adjusting means for the described purpose.

Cancel the claims and substitute:

A
Mar 12/03
" " "
"1. In a fruit sizing machine, a runway for the fruit comprising cooperating parallel members, one of said members consisting of a series of rolls arranged end to end and disposed progressively at different distances from the other member, forming communicating fruit-discharging apertures of progressively different widths along the length of the runway, [588] means for adjusting each roll independently to vary the size of the aperture formed thereby, and means for driving the rolls to force the fruit through said apertures, substantially as described.

Mar. 12/03
" " "
2. In a fruit sizing machine, a supporting frame, a runway for the fruit comprising cooperating parallel members, one of said members consisting of a series of rolls arranged end to end and disposed progressively at different distances from the other member, forming a communicating fruit discharging apertures of progressively different widths along the length of the runway, brackets carrying the rolls, means mounted upon the frame for moving each bracket and adjusting each roll independently to vary the size of the aperture formed thereby, and means for driving the rolls to force the fruit through said apertures, substantially as described.

3. In a fruit sizing machine, the combination with a supporting frame, of a fruit runway formed by a relatively stationary member and a longitudinal

series of rolls arranged end to end at different distances from said stationary member, thus providing communicating spaces of progressively varying sizes for the discharge of the fruit, means for independently adjusting the rolls with relation to said stationary member, means for driving the rolls ~~to force the fruit down through said spaces~~, and means for positively feeding the fruit along the runway, substantially as set forth.

4. In a fruit grading machine, the combination with a supporting frame, of a fruit runway comprising a relatively stationary member and a series of rolls disposed in parallel [589] relation to said member and arranged end to end at different distances from the stationary member, forming communicating passages of progressively varying sizes along the run-way for the discharge of the fruit, means for adjusting the rolls with relation to the stationary member, means for driving said rolls, ~~to force the fruit down through said passages~~ and a travelling belt moving in parallel relation to the stationary member and rolls for positively feeding the fruit along the runway, substantially as described.

5. In a fruit grading machine, the combination with a supporting frame, of a central longitudinal divider, forming one side of two parallel runways, a series of rolls disposed on each side of the divider and arranged end to end at different distances from the divider, forming therewith a runway having progressively varying discharge spaces for the fruit, means for adjusting the rolls of each series toward

Mar 12/03
 " " "

Mar. 12/03

and from the common divider, means for driving the rolls, and belts disposed on opposite sides of the divider for positively feeding the fruit along the runways, substantially as described.

6. In a fruit sizing machine, the combination with a supporting frame, of a longitudinal shaft, transverse shafts, one of which is adapted to be driven from a suitable source of power, a runway comprising a relatively stationary member and an adjustable member consisting of a series of rolls arranged parallel therewith and disposed end to end and at different distances from the stationary member, means for independently adjusting the rolls with relation to the stationary member, means for driving the rolls from the longitudinal shaft, and a belt connected with the transverse shafts for positively feeding the fruit along the runway, substantially as set forth. [590]

Mar. 12/03

7. In a fruit grading machine, a runway formed of two parallel members, one of said *embers* consisting of a series of end to end rolls, brackets carrying the rolls, guides for the brackets, and means for adjusting the ^{brackets} rolls upon the guides, substantially as set forth.” [^]

Mar. 12/03

Remarks.

The oath called for will be furnished at the earliest practical date.

The reference numerals, 1, 12 and 13 and the section lines 3-3 and 4-4 have been properly applied to the drawings.

As now presented, it is thought that the claims should be allowed, as it is apparent that the references do not show a runway consisting of two members, one comprising a series of end to end rolls, normally arranged at different distances from the other member and capable of independent adjustment toward and from said member. The parts shown in the Patent to Dillman do not cooperate to form a runway, but simply to provide spaces for the passage of the different sizes of fruits.

Permission is requested to show the groove and the rod 17 in the roller 9, and upon the bracket 16, shown in Figure 5.

A reconsideration is requested.

Respectfully submitted,

CHARLES RAYBURN.

By H. B. WILLSON & CO.,

His Attorneys.

Washington, D. C., Dec. 15, 1902. [591]

2-260.

Div. ——— Room No. 243.

Address only

"The Commissioner of Patents,
Washington, D. C."

Paper No. 4

All communications respecting this application should give the serial number, date of filing and title of invention.

M. E. C.

DEPARTMENT OF THE INTERIOR.
UNITED STATES PATENT OFFICE.

Washington, D. C., Jan. 3, 1903.

Charles Rayburn,
Care Spear & Seely,
City.

Please find below a communication from the EX-

AMINER in charge of your application #120,131
filed Aug. 18, 1902, for Fruit Graders.

F. I. ALLEN,
~~E. B. MOORE,~~
Commissioner of Patents.

The draftsman sends this drawing back with the
statement that five cents are still necessary to pay
for the print ordered in this case.

A. McNAUGHT,
Act'g Examiner,
Division XXV.

C. P. G. [592]

RECEIVED JAN. 7, 1903.

H. B. Willson & Co.

Application Clerk.

JAN. 10, 1908.

U. S. Patent Office.

PATENT OFFICE. Serial No. 120,131. Paper
JAN. 12, 1903. No. 5. Oath.
DIVISION XXV. Filed Jan. 10, 1903.
Oath.

County of Los Angeles,
State of California,—ss.

Charles Rayburn, the above named petitioner, be-
ing duly sworn, deposes and says that he is a citizen
of the United States and resident of ~~Covina~~, Lind-
say, Tulare County, ~~Los Angeles~~, California, and
that he verily believes himself to be the original, first,
and sole inventor of the improvement in Fruit

Graders described and claimed in the annexed specification; that he does not know and does not believe that the same was ever known or used before his invention or discovery thereof; or patented or described in any printed publication in any Country before his invention or discovery thereof or more than two years prior to this application or in public use or on sale in the United States for more than two years prior to this application, and that no application, for patent on said improvement has been filed by him or his representatives or assigns in any country foreign to the United States, ~~except~~ as follows:

Correction in residence made before signing "G. W. L."

x CHARLES RAYBURN.

Sworn to and subscribed before me, this 30th day of December, 1902.

[Seal]

JAS. W. LAREN,

Notary Public in and for Los Angeles County California. [593]

2-260.

Div. ——— Room No. 243.

Paper No. 6

Address only
"The Commissioner of Patents,
Washington, D. C."

All communications respecting this
application should give the serial num-
ber, date of filing and title of inven-
tion.

DEPARTMENT OF THE INTERIOR.
UNITED STATES PATENT OFFICE.

M. E. C.

Washington, D. C., March 10, 1903.

Mailed " " "

Charles Rayburn,
Care H. B. WILLSON & Co.,
City.

Please find below a communication from the EX-
AMINER in charge of your application #120,131,
Filed Aug. 18, 1902, for Fruit Graders.

F. I. ALLEN,

~~E. B. MOORE,~~

Commissioner of Patents.

Permission is given to make the changes in the
drawing, requested in the last paragraph of amend-
ment filed Dec. 18, 1902.

The term "to force the fruit through said aper-
tures," used in the claims is rather inaccurate, since
driving the rollers in the given direction lets rather
than "forces" the fruit through the openings. The
erasure of the statement would leave the claim fully
as clear.

The claims may be allowed, as at present advised.

LEWIS B. WYNNE,

Examiner,

Division XXV.

C. P. G. [594]

PATENT OFFICE.

MAR. 12, 1903.

DIVISION XXV.

Hi/B.

Serial No. 120,131. Paper No. 7.
Amendment.

Filed Mar. 12, 1903.

IN THE UNITED STATES PATENT OFFICE.

Charles Rayburn.

"Fruit Graders."

Room #243.

Filed Aug. 18, 1902.

Serial No. 120,131.

HON. COMMISSIONER OF PATENTS,

Sir:—

In re the above entitled application for patent,
please amend as follows:

Claims 1 and 2, cancel "to force the fruit through
said apertures."

Claim 3, cancel "to force the fruit down through
said spaces."

Claim 4 line 9 insert a comma (,) after "rolls"
and cancel "to force the fruit down through said
passages."

Claim 6 line 9 insert a comma (,) after "shaft."

Claim 7 line 4 cancel "rolls" and substitute
"brackets."

Remarks:—The above amendments to claims 1, 2,
3 and 4 are made in view of the statement in second
sentence of second paragraph of official letter of
Mar. 10, 1903. The amendment to claim 7 is made to
cure inaccuracy.

The drawing has been corrected, and allowance of the case at an early date is requested.

Respectfully submitted,

CHARLES RAYBURN,
By H. B. WILLSON & CO.,

His Attys.

Washington, D. C., March 11, 1903. [595]

Photograph of Blue-print of Drawings of Fruit Grader Accompanying Serial No. 120,131.

(Endorsed.) [596]

2-181.

e Division.

Serial No. 120,131

nications should be addressed to
e Commissioner of Patents,
Washington, D. C.

DEPARTMENT OF THE INTERIOR.

U. S. PATENT OFFICE.

Washington, D. C., March 20, 1903.

Charles Rayburn,
c/o H. B. Willson & Co.

Wash.

D. C.

Sir:—

Your APPLICATION FOR A PATENT for an IMPROVEMENT IN Fruit Graders. Filed Aug. 18, 1902, has been examined and ALLOWED.

The Final Fee TWENTY DOLLARS, must be paid and the Letters Patent bear date as of a day not later than SIX MONTHS from the time of this present notice of allowance.

If the final fee is not paid within that period the patent will be withheld, and your only relief will be by a renewal of the application, with additional fees,

(HAND) If payment is made by check or draft, the credit allowed is subject to the collection of the same.

(HAND) IN REMITTING THE FINAL FEE GIVE THE SERIAL NUMBER AT THE HEAD OF THIS NOTICE.

under the provisions of Section 4897, Revised Statutes. The office aims to deliver patents upon the day of their date, and on which their term begins to run; but to do this properly applicants will be expected to pay their final fees at least TWENTY DAYS prior to the conclusion of the six months allowed them by law. The printing photolithographing and engrossing of the several patent parts preparatory to final signing and sealing, will consume the intervening time, and such work will not be done until after payment of the necessary fees.

When you send the final fee you will also send, **DISTINCTLY AND PLAINLY WRITTEN**, the name of the **INVENTOR** and **TITLE OF INVENTION AS ABOVE GIVEN**, **DATE OF ALLOWANCE** (which is the date of this circular), **DATE OF FILING**, and, if assigned, the **NAMES OF THE ASSIGNEES**.

If you desire to have the patent issue to **ASSIGNEES**, an assignment containing a **REQUEST** to that effect, together with the fee for recording the same, must be filed in this office on or before the date of payment of final fee.

After issue of the patent uncertified copies of the drawings and specifications may be purchased at the price of 5 cents each. The money should accompany the order. Postage stamps [597] will not be received.

Respectfully,

F. I. ALLEN,

Commissioner of Patents.

(Hand.) After allowance, and prior to payment

of the final fee, applicants should carefully scrutinize the description to see that their statements and language are correct, as mistakes not incurred through the fault of the office, and not affording legal grounds for reissues, will not be corrected after the delivery of the letters patent to the patentee or his agent. [598]

2-327.

\$20— RECEIVED.

APR. 9, 1903. F.

CHIEF CLERK U. S.

PATENT OFFICE.

MEMORANDUM

of

FEE PAID AT UNITED STATES PATENT
OFFICE.

(Be careful to give correct serial No.)

Serial No. 120,131 , 1902.

INVENTOR:

Charles Rayburn,

PATENT TO BE ISSUED

as per record.

NAME OF INVENTION, AS ALLOWED

“Fruit Graders.”

DATE OF PAYMENT:

April 9, 1903.

FEE:

\$20.

DATE OF FILING:

Aug. 18/02.

DATE OF CIRCULAR OF ALLOWANCE:

March 20/03.

The Commissioner of Patents will please apply
the accompanying fee as indicated above.

H. B. WILLSON & CO.,
Attorney.

Send Patent to

H. B. Willson & Co.
Issue Room.

[599]

2-079.

INTERFERENCE CARD.

Interference No. Paper No. 8.
Name, Rayburn.
Serial No.
Title,
Filed,
Interference with

Strain

DECISIONS OF.

Primary Examiner	Dated, Nov. 5/03.
Ex'r of Interferences	Dated, June 23/04.
To Board	Dated, Aug. 8/04.
Commissioner	Dated,

REMARKS:

Unfav dec'n by Exr X—

“ affd. by
“ “ “ Board

Δ

Oct. 24/04.

This should be placed in each application or patent
involved in interference in addition to the interfer-
ence letters by Primary Examiner. [600]

2-213.

Forwarded from Div. _____ to
Examiner of Interferences.

Paper No. _____
(Interference.)
Paper No. 9—

Forward to
Examiner of
Interferences from
Div. 35, Nov. 5, 1903.

DEPARTMENT OF THE INTERIOR.
UNITED STATES PATENT OFFICE.

Washington, D. C., NOV. 10, 1903. 190

Mailed “ “ “

Copy of this letter sent patentee.

Charles Rayburn,
Care H. B. Willson & Co.,
City.

Please find below a copy of a communication from
the Examiner concerning your patent No. 726,756,
patented April 28, 1903, for Fruit Graders (applica-
tion filed Aug. 18, 1902.)

Very respectfully, 23151

F. I. ALLEN,
E. B. MOORE,

Commissioner of Patents.

Room No 315
Address only
The Commissioner of Patents,
Washington, D. C.
6-1636

Your case, above referred to, is adjudged to inter-
fere with others, hereafter specified, and the ques-
tion of priority will be determined in conformity
with the Rules.

The statement demanded by Rule 110 must be
sealed up and filed on or before the 22 DEC. 1903

day of 190—, with the subject of the invention, and name of party filing it, indorsed on the envelope. The subject matter involved in the interference is

1. "In a fruit sizing machine, a runway for the fruit comprising cooperating parallel members, one of said members consisting of a series of rolls arranged end to end and disposed progressively at different distances from the other member, forming communicating fruit-discharging apertures of progressively different widths along the length of the runway, means for adjusting each roll independently to vary the size of the aperture formed thereby, and means for driving the rolls, substantially as described.
2. "In a fruit sizing machine, a supporting frame, a runway for the fruit comprising cooperating parallel members, one of said members consisting of a series of rolls arranged end to end and disposed progressively at different distances from the other member, forming communicating fruit-discharging apertures of progressively different widths along the length of the runway, brackets carrying the rolls, means mounted upon the frame for moving each bracket and adjusting each roll independently to vary the size of the aperture formed thereby, and means for driving the rolls, substantially as described.
3. "In a fruit sizing machine, the combination with a supporting frame, of a fruit runway formed by a relatively stationary member and a longitudinal series of rolls arranged end to end at different distances from said stationary mem-

ber, thus providing [601] communicating spaces of progressively varying sizes for the discharge of the fruit, means for independently adjusting the rolls with relation to said stationary member, means for driving the rolls, and means for positively feeding the fruit along the runway, substantially as described.

4. "In a fruit grading machine, the combination with a supporting frame, of a fruit runway comprising a relatively stationary member and a series of rolls disposed in parallel relation to said member and arranged end to end at different distances from the stationary member, forming communicating passages of progressively varying sizes along the runway for the discharge of the fruit, means for adjusting the rolls with relation to the stationary member, means for driving said rolls, and a traveling belt moving in parallel relation to the stationary member and rolls for positively feeding the fruit along the runway, substantially as described.
5. "In a fruit grading machine, the combination with a supporting frame, of a central longitudinal divider, forming one side of each of two parallel runways, a series of rolls disposed on each side of the divider, and arranged end to end at different distances from the divider, forming therewith a runway having progressively varying discharge spaces for the fruit, means for adjusting the rolls of each series toward and from the common divider, means for driving the rolls, and belts disposed on opposite sides of the di-

- vider for positively feeding the fruit along the runways, substantially as described.
6. "In a fruit sizing machine, the combination with a supporting frame, of a longitudinal shaft, transverse shafts, one of which is adapted to be driven from a suitable source of power, a runway comprising a relatively stationary member and an adjustable member consisting of a series of rolls arranged parallel therewith and disposed end to end at different distances from the stationary member, means for independently adjusting the rolls with relation to the stationary member, means for driving the rolls from the longitudinal shaft, and a belt connected with the transverse shafts for positively feeding the fruit along the runway, substantially as set forth.
 7. "In a fruit grading machine, a runway formed of two parallel members, one of said members consisting of a series of end to end rolls, brackets carrying the rolls, guides for the brackets, and means for adjusting the brackets upon the guides, substantially as set forth."
 - (a) The interference involves your patent above identified and
 - (b) A reissue application for Fruit Graders, filed by Robert Strain, of Fullerton, California, whose attorneys of record are Townsend Bros., of Los Angeles, California, and whose assignees [602] are Fred Stebler and Austin A. Gamble, both of Riverside, California (original patent #730,412, patented June 9, 1903, on an appli-

cation filed by Strain prior to the date of this application, thus making Strain the senior party to this interference.)

- (c) The relation of the counts of the interference to the claims of the respective parties is as follows:

Counts:	Rayburn:	Strain:
1,	1,	4,
2,	2,	5,
3,	3,	6,
4,	4,	7,
5,	5,	8,
6,	6,	9,
7,	7,	10.

LEWIS B. WYNNE,
Primary Examiner,
Division XXV.

C. RAYBURN.
FRUIT GRADER.

APPLICATION FILED AUG. 18, 1902.

NO MODEL.

2 SHEETS—SHEET 1.

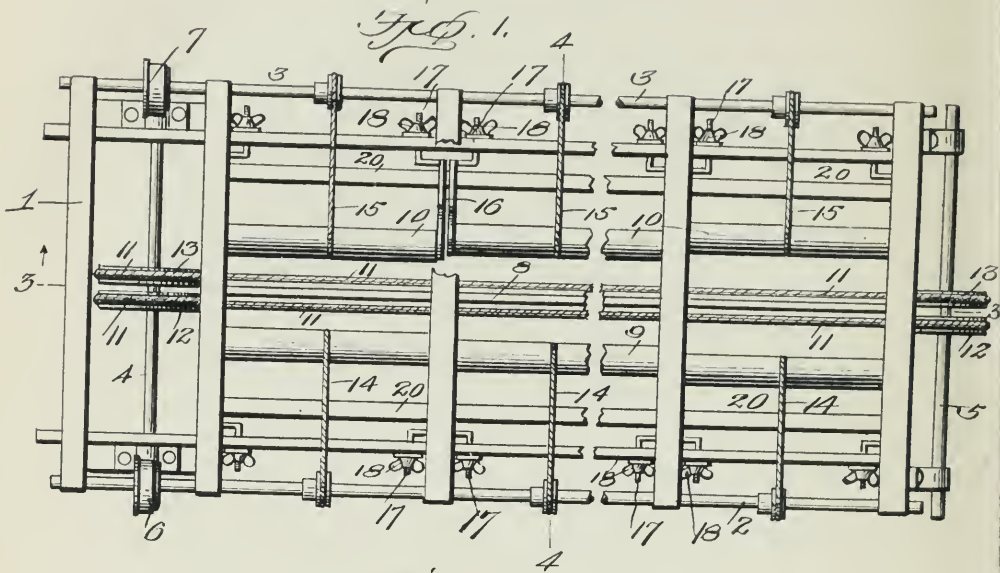
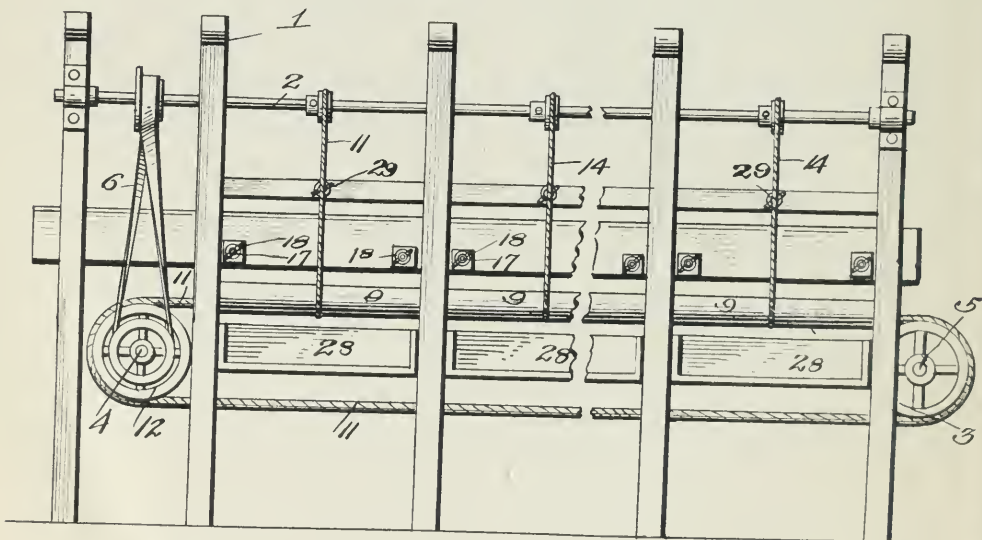


Fig. 2



Inventor

Charles Rayburn

Witnesses

E. H. Hunt
C. H. Bullen

By

A. B. Wilson & Co

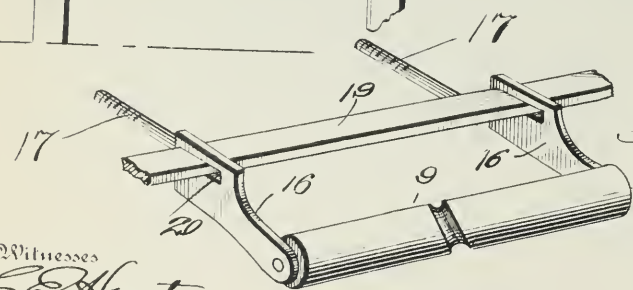
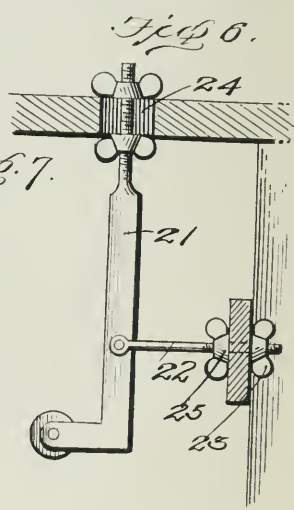
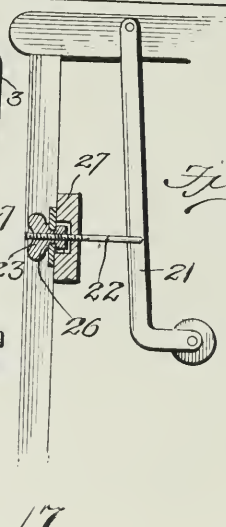
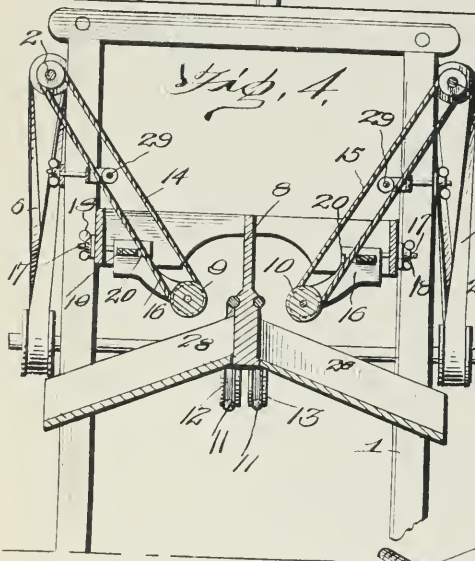
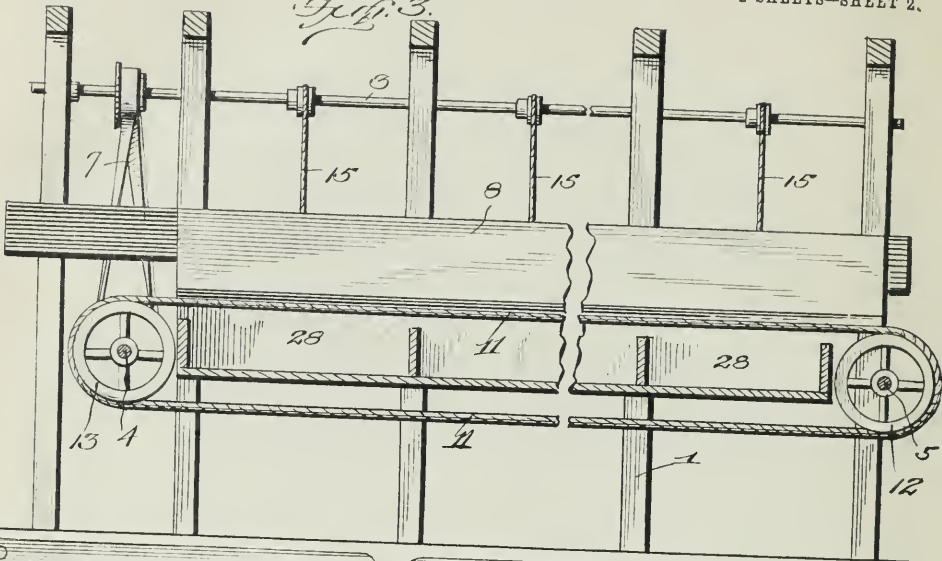
Attorneys

C. RAYBURN.
FRUIT GRADER.

APPLICATION FILED AUG. 18, 1902.

NO MODEL.

2 SHEETS—SHEET 2.



Inventor
Charles Rayburn

Witnesses
E. Hunt.
J. Millson

334
A. B. Wilson & Co
Attorneys

UNITED STATES PATENT OFFICE.

CHARLES RAYBURN, OF VISALIA, CALIFORNIA.

FRUIT-GRADER.

SPECIFICATION forming part of Letters Patent No. 726,756, dated April 28, 1903.

Application filed August 18, 1902. Serial No. 120,131. (No model.)

To all whom it may concern:

Be it known that I, CHARLES RAYBURN, a citizen of the United States, residing at Visalia, in the county of Tulare and State of California, have invented certain new and useful Improvements in Fruit-Graders; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in machines for sizing or grading oranges or other fruit—that is, separating the fruit into lots, all the fruit in each lot being essentially of the same dimensions or size.

The most efficient machine now in use for sizing oranges and similarly-shaped fruit embodies continuous graduated rollers whose separating surfaces or sections have a fixed relation, so that the sections cannot be independently adjusted for fine grading nor varied for this purpose without wrapping those surfaces which it is desired to change with paper or other material to enable the sizes of the discharge spaces or apertures formed by some of the surfaces to be varied without varying the spaces or apertures formed by the remaining surfaces.

The object of my invention is to obviate this difficulty by the provision of a series of rolls which are adjustable independently of one another, so that any of the number of discharge spaces or apertures may be varied as to size with the utmost nicety without varying the sizes of the others.

With this and other objects in view, which will appear as the nature of the invention is better understood, the same consists in certain novel features of construction, combination, and arrangement of parts, as will be hereinafter more fully described, and particularly pointed out in the appended claims.

In the accompanying drawings, Figure 1 is a top plan view of a fruit-sizer embodying my invention, a portion of the frame being broken away to expose the construction. Fig. 2 is a side elevation of the same. Fig. 3 is a longitudinal section substantially on the line 2 2 of Fig. 1. Fig. 4 is a cross-section on the line 3 3 of Fig. 1. Fig. 5 is a detail view of one of the grooved rollers and its supports. Fig.

6 is a view showing a modification in the roller supporting and adjusting means. Fig. 7 is a similar view showing a further modification.

The numeral 1 in the drawings represents the frame of the machine, in the upper portion of which are journaled longitudinal parallel shafts 2 and 3, which are located on opposite sides of the center of said frame, and 4 and 5 represent transverse shafts located at the ends of the frame. The shaft 4 receives motion from any suitable source of power and drives the shafts 2 and 3 through the medium of the connecting-belts 6 and 7.

The fruit sizing or grading devices are arranged below and between the shafts 2 and 3 and consist in the specific construction shown of a center piece or divider 8 and two longitudinal parallel series of rolls 9 and 10, although, if desired, but a single series of rolls may be used in connection with the center piece, in which case the driving mechanism will be accordingly modified. Belts 11, traveling in grooves in the center piece or divider and passing around grooved wheels 12 and 13 on the shafts 4 and 5, are provided for feeding the fruit through the machine and over and along the sizing devices in the usual manner. The rolls 9 are driven by belts 14 from the shaft 2 and the rolls 10 by corresponding belts 15 from the shaft 3.

As shown, the rolls of each series extend end to end and parallel with the center piece 8 and are independently mounted, each being journaled at its ends in brackets 16, adjustably secured to the frame, so that it may be adjusted toward and from said center piece independently of the other rolls. The distance between the rolls of each series and the center piece increases progressively from one to the other end of the machine, forming apertures for the discharge of the fruit, and by adjustably mounting the rolls independently of one another it will be seen that the discharge-aperture for each grade of fruit formed between each roll and the center piece may be quickly and conveniently varied to change the size of the aperture as desired, thus securing a nicety of adjustment of each roll without the necessity of varying the position of any other roll. Hence the sizes of the discharge-apertures formed by some of the rolls

may be varied without varying the apertures formed by the remaining rolls. The operation of the rolls in forcing the fruit through the proper apertures will be readily understood by those conversant with the art.

The means employed for effecting the adjustment of the brackets may of course have a wide range of variation in form, construction, and mode of application. In Figs. 1 to 5, inclusive, I have shown one form of adjustment, consisting in employing screws 17, carrying wing-nuts 18, for moving the brackets in one direction or the other to adjust the rolls independently with relation to the center piece 8, the brackets being held and guided by supports 19, projecting through slots 20, formed therein.

In Fig. 6 I have shown a modification in the supporting and adjusting mechanism for the brackets wherein each bracket is suspended from the top of the frame and is adjustable vertically and laterally of the frame through the medium of a hanger 21 and adjusting-screw 22, each of which is threaded to receive a wing-nut 23, the hanger being adjustable in a slot 24 to permit of the lateral adjustment of the roll. In each case the roll is independently mounted and adjustable for the purpose set forth. The screw 22 may also have a lock-nut 25.

In the form of adjusting means shown in Fig. 7 the screw 22 carries a wing-nut 26, which is swiveled in a bearing-plate 27, secured to the side of the frame and by means of which the screw may be moved inward or outward to adjust the bracket as desired. I do not of course limit myself to either of these modes of adjustment, but reserve the right to employ any suitable adjusting means for the described purpose. The fruit passing through the discharge-apertures falls into the spouts 28, of which there are as many employed as there are discharge-apertures. It will be noted that the rolls are positioned high enough to form no impediment to the free adjustment of the spouts below to receive the fruit.

The rolls may all be of the same size or different sizes, as desired.

Idlers 29 are provided for adjusting the belts 14 and 15 to compensate for the adjustment of the rolls and maintaining a desired tautness of the belts.

From the foregoing description, taken in connection with the accompanying drawings, it is thought that the construction, mode of operation, and advantages of the invention will be readily apparent without requiring an extended explanation.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention, and I therefore reserve to myself the right to make such changes as fairly fall within the scope thereof.

Having thus described the invention, what is claimed, and desired to be secured by Letters Patent, is—

1. In a fruit-sizing machine, a runway for the fruit comprising cooperating parallel members, one of said members consisting of a series of rolls arranged end to end and disposed progressively at different distances from the other member, forming communicating fruit-discharging apertures of progressively-different widths along the length of the runway, means for adjusting each roll independently to vary the size of the aperture formed thereby, and means for driving the rolls, substantially as described.

2. In a fruit-sizing machine, a supporting-frame, a runway for the fruit comprising cooperating parallel members, one of said members consisting of a series of rolls arranged end to end and disposed progressively at different distances from the other member, forming communicating fruit-discharging apertures of progressively-different widths along the length of the runway, brackets carrying the rolls, means mounted upon the frame for moving each bracket and adjusting each roll independently to vary the size of the aperture formed thereby, and means for driving the rolls, substantially as described.

3. In a fruit-sizing machine, the combination with a supporting-frame, of a fruit-runway formed by a relatively stationary member and a longitudinal series of rolls arranged end to end at different distances from said stationary member, thus providing communicating spaces of progressively-varying sizes for the discharge of the fruit, means for independently adjusting the rolls with relation to said stationary member, means for driving the rolls, and means for positively feeding the fruit along the runway, substantially as set forth.

4. In a fruit-grading machine, the combination with a supporting-frame, of a fruit-runway comprising a relatively stationary member and a series of rolls disposed in parallel relation to said member and arranged end to end at different distances from the stationary member, forming communicating passages of progressively-varying sizes along the runway for the discharge of the fruit, means for adjusting the rolls with relation to the stationary member, means for driving said rolls, and a traveling belt moving in parallel relation to the stationary member and rolls for positively feeding the fruit along the runway, substantially as described.

5. In a fruit-grading machine, the combination with a supporting-frame, of a central longitudinal divider, forming one side of each of two parallel runways, a series of rolls disposed on each side of the divider and arranged end to end at different distances from the divider, forming therewith a runway having progressively-varying discharge-spaces for the fruit, means for adjusting the rolls of each

series toward and from the common divider, means for driving the rolls, and belts disposed on opposite sides of the divider for positively feeding the fruit along the runways, substantially as described.

5
10
15
6. In a fruit-sizing machine, the combination with a supporting-frame, of a longitudinal shaft, transverse shafts, one of which is adapted to be driven from a suitable source of power, a runway comprising a relatively stationary member and an adjustable member consisting of a series of rolls arranged parallel there with and disposed end to end and at different distances from the stationary member, means for independently adjusting the rolls with relation to the stationary member, means for driving the rolls from the longitu-

dinal shaft, and a belt connected with the transverse shafts for positively feeding the fruit along the runway, substantially as set forth.

7. In a fruit-grading machine, a runway formed of two parallel members, one of said members consisting of a series of end-to-end rolls, brackets carrying the rolls, guides for the brackets, and means for adjusting the brackets upon the guides, substantially as set forth.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

CHAS. RAYBURN.

Witnesses:

JOHN CADOGAN,
WM. H. MOUSER.

1902.

130 THRASHING,
Fruit and Vegetable Separators.
CONTENTS.

[In pencil:] K

Print Photoliths.

Application papers. O. K.

- 1. Rej. Dec. 4, 1902.
- 2. Power to Inspect Dec. 16, 1902.
- 3. Amendment A. Dec. 18, 1902.
- 4. Letter Jan. 3, 1903.
- 5. Oath Jan. 10, 1903.
- 6. Letter Mar. 10, 1903.
- 7. Amendment Mar. 12, 1903.
- 8. X Card.
- 9. Intf. letter Nov. 10/03.
- 10.
- 11.
- 12.
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- 15.
- 16.
- 17.
- 18.
- 19.
- 20.
- 21.
- 22.
- 23. Fruit & Veg. Sep.

TITLE.

Improvement in Fruit Graders.

(Endorsed.) [608]

* * * * *

[Title of Court and Cause.]

PROOFS TAKEN ON BEHALF OF COMPLAINANT FOR USE AT FINAL HEARING IN THE ABOVE-ENTITLED SUIT AT TEN O'CLOCK IN THE FORENOON OF WEDNESDAY, JUNE, 19, 1912, AT THE OFFICE OF FREDERICK S. LYON, 503-8 MERCHANTS' TRUST COMPANY BUILDING, LOS ANGELES, CALIFORNIA, BEFORE EARL CURTIS PECK, NOTARY PUBLIC IN AND FOR THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, BY CONSENT.

PRESENT: FREDERICK S. LYON, Esq., on Behalf of Complainant.

NICHOLAS A. ACKER, on Behalf of Defendants and GEORGE D. PARKER Personally.

Whereupon the following proceedings were had:

[Deposition of Fred Stebler, for Complainant.]

FRED STEBLER, a witness recalled in his own behalf, being first duly cautioned and sworn to testify the truth, the whole truth and nothing but the truth, testified as [611] follows, to wit:

Direct Examination.

(By Mr. LYON.)

Q. 1. You are the Fred Stebler who is the complainant in this suit and who has heretofore testified in this action? A. Yes, sir.

(Deposition of Fred Stebler.)

Q. 2. You heard the testimony of George D. Parker? A. Yes, sir.

Q. 3. And the testimony of one or two other witnesses in regard to the attempted use of the individual adjustable independent roller grader and the use of such grader without the belt for driving or rotating the rollers? A. Yes, sir.

Q. 4. Since the giving of such testimony, have you in any manner verified your testimony in regard to such matter? A. I have.

Q. 5. What have you done in that regard?

A. I have visited quite a number of packing-houses using my independent roller sizers and endeavored to demonstrate by actual experiment to my own satisfaction whether or not it is a fact that the positive driving of these rollers was necessary in order for the machine to perform its function and in no case have I been able to find where the discarding of the belt from any one of these rollers seemed to make any material difference in the operation of grading fruit on this machine, either as to the sizing of fruit or the general operation of the machine. In no case have I been able to find where the machine would choke up from nondriving of these [612] rollers, but, on the other hand, I did find that on the removal of the belt from any one of these rollers, the roller would continue to rotate when the fruit was run over it through the action of the fruit itself and thus enable the machine to perform its function which it is intended to perform in grading fruit.

Q. 6. You have used in your last answer the term

(Deposition of Fred Stebler.)

“choke up.” What do you mean by that term?

A. By this I mean, as I suppose Mr. Parker meant, that there was no choking or crowding on the grade-way and that the fruit would carry on by this nondriven roller through the action of the solid belt or rope.

Q. 7. Machines in what packing-houses did you examine?

A. I examined machines in the packing-house of the Mountain View Orange and Lemon Growers' Association, at Upland, and the Stewart Citrus Association at Upland, and the packing-house of the Upland Citrus Association, where I believe Mr. Parker testified he got negative results, and the packing-house of the Arlington Heights Fruit Company at Prenda.

Q. 8. Where is Prenda?

A. It is about three miles from the city of Riverside in Riverside county.

Q. 9. In this last packing-house, were they engaged in commercially packing oranges at the time?

A. Yes, sir.

Q. 10. What did you do in order to demonstrate the commercial practicability of the individual adjustable independent roller grader of the patent in suit without [613] the use of means for mechanically turning or rotating the rollers, in this last packing-house?

A. I simply removed the small driving belt from the pulley on the driving shaft and also removed from this belt the automatic weight tightener so that

(Deposition of Fred Stebler.)

while the belt itself was in contact with the roller, it was slack and free from the driving shaft, thus permitting the roller to freely rotate from the slight action of the fruit against it as it passed over the grade-way.

Q. 11. In this particular packing-house what rollers in position along the grade-way did you so try in the commercial grading of oranges?

A. It was about the second or third roller from the feed end, that is the end from which the fruit is fed into the machine.

Q. 12. Who was present during such trial?

A. Yourself, Mr. Arthur P. Knight, who has previously testified in this case, also a Mr. Whiffin, the packing-house manager.

Q. 13. To what extent did such roller with the belt removed rotate during the commercial use of such machine?

A. Why it rotated continuously when the fruit was in contact with it. It would only stop when the fruit was not in contact with it.

Q. 14. Did you see any difference in the rate of rotation with or without the belt?

A. Almost the same as when it was positively driven.

Q. 15. And at Uplands, what roller in the length of the run-way did you try without the belt thereon?
[614]

A. Well, at the Mountain View house I think it was the second or third roller from the feed end of the grade-way and at the Upland Citrus Association

(Deposition of Fred Stebler.)

it was about the third or fourth roller from the entrance to the grade-way and at the Stewart house we tried rollers at both ends of the machine.

Q. 16. What was the object of trying different rollers on these different machines?

A. Merely to determine the proportionate rate of rotation.

Q. 17. Did it make any difference in the various operations of the machine which ones of the rollers were mechanically driven?

A. We could not see that it did.

Q. 18. If I understand the operation of a fruit grader, Mr. Stebler, the larger amount of fruit passes over the rollers at the feed or intake end, is that correct? A. That is correct.

Q. 19. And if there were to be any crowding of the fruit it would be more apt to appear at that end?

A. It certainly would.

Q. 20. Have you seen any of the defendant's machines in operation? A. Yes, sir.

Q. 21. Have you seen any one of them in operation at the Riverside Heights Orange Growers' Association's packing-house at Riverside, California?

A. Yes, sir.

Q. 22. When did you last see them in operation?

A. *I* week ago to-day I believe it was, which would be [615] the twelfth.

Q. 23. In the presence of whom?

A. In the presence of yourself and Mr. Knight.

Q. 24. What was the object of such inspection?

A. Well, this inspection was made with the idea

(Deposition of Fred Stebler.)

of verifying to our own satisfaction the comparison between defendant's machine and my own.

Q. 25. Were they commercially packing oranges at that time? A. Yes, sir.

Q. 26. Did you observe anywhere else on that day, or the day previous, the operation of the Parker machine involved in this litigation?

A. Not on that day; no.

Q. 27. At the Riverside Heights Orange Growers' Association's packing-house at Riverside, to which you last referred, at one end of the packing-house they also have one of your graders built under the patent here in suit, have they not? A. Yes, sir.

Q. 28. Did you observe the operation or rate of rotation of the rollers in your machine with that in the Parker or defendant's device at that time?

A. Yes, to this extent that taking my machine with the belt off the roller, that is with the roller nonpositively driven, the rotation of the roller in my machine and the rotation of the roller in Parker's machine at approximately the same given point, or near the intake end, the rate of rotation was approximately the same.

Q. 29. Referring now to the Parker machine which you say [616] you saw in operation on Wednesday, June 12th, at the Riverside Heights Orange Growers' Association's packing-house at Riverside, California did you notice particularly the action of the individual independent adjustable rollers in that device? A. Yes, sir.

Q. 30. Were these rollers stationary or in motion?

(Deposition of Fred Stebler.)

A. They were only stationary when there was no fruit running against them.

Q. 31. And what did you observe in regard to the first two or three rollers toward the intake end?

A. They were in continuous rotation as long as there was any fruit running over them.

Q. 32. In what direction was this rotation with reference to the axes of the rollers and with respect to the longitudinally traveling belt?

A. The top of the roller turned outward or away from the traveling belt, the same as in my machine.

Q. 33. You say, "the same as in my machine."

Do you mean the machine of the patent in suit?

A. Yes, sir.

Q. 34. And the same as the rollers are driven in such machine when the little cross-belts are used?

A. Exactly.

Q. 33. Did you observe whether in the Riverside Heights Orange Growers' Association's machines there were one or more than one of these individual rollers for a given fruit bin?

A. Why my observation in this case was that in some bins [617] there was one roller and sometimes two rollers to a given fruit bin on the same machine, that is I should say on the same side of the machine on the same grade-way.

Q. 36. And how many in all of these machines were there in the packing-house of the Riverside Heights Orange Growers' Association at Riverside?

A. Six, I believe.

Q. 37. And how many of these machines were

(Deposition of Fred Stebler.)

there in that house at the time of the commencement of this suit? A. One.

Mr. ACKER.—What machines are you referring to Mr. Stebler, when you say six?

A. The machines manufactured by the defendant.

Mr. ACKER.—That is, there are six of the Parker machines?

A. Yes, sir.

Q. 38. Do you know when the other five of these machines have been installed?

A. Not exactly, but it is within the last year.

Q. 39. Since this suit was commenced?

A. Since this suit was commenced.

Q. 40. Since giving your testimony before in regard to the filler sticks, have you made any investigation in regard to that matter? A. Yes, sir.

Q. 41. Where and to what extent?

A. Well, I believe in my previous testimony I testified that I knew where they had been used in the Stewart packing-house at Upland.

Q. 42. This packing-house is the one where Mr. Parker [618] testified that an attempt had been made to use the rollers without positively driving them?

A. No, sir, that is not the packing-house.

Q. 43. Well, proceed with your answer.

A. So when I was over there lately investigating this matter further I inquired into this matter of these filler sticks and a foreman in charge of these machines showed me how and where they were used. He did not happen to be using them that day, but

(Deposition of Fred Stebler.)

he said he often used them when he had occasion to and that he would probably use them the next day. He showed me the device where he had it laid aside for safekeeping and he also put it into the machine and showed me how he used it.

Q. 44. Were the machines in commercial operation at that time? A. Yes, sir.

Q. 45. Who were present?

A. Yourself and Mr. Knight.

Q. 46. That was on Wednesday the twelfth day of June, 1912? A. Yes, sir.

Q. 47. Describe this filler stick construction as it was shown to you by the person referred to.

A. It was nothing more than an ordinary pine stick made out of a car strip, I believe, such as he made himself with a hatchet and nails. He had taken the trouble to face it or give it a covering where the fruit would come in contact with it with leather and he simply laid it into the bottom of the grade-way of the sizing machine between [619] the travelling belt and the independently adjustable roller in such a way that the fruit where it came in contact with the traveling belt would not pass through the aperture on this particular grade-way when the stick was inserted, and therefore would have to be carried to the next roller. The function of the stick, therefore, was to close up this grading aperture and constitute a nongrading space, in the manner indicated, by carrying the fruit to the next roller and had the same effect as to close in the roller.

Q. 48. Can you state why this foreman of this par-

(Deposition of Fred Stebler.)

ticular packing-house preferred to use this filler stick instead of closing in the individual roller by independent adjustment?

A. Because he could place or replace the filler stick quicker than he could adjust or close in the roller. It is therefore merely a matter of saving time.

Q. 49. If I understand you correctly, the same result could be secured by closing in the individual roller by the independent adjustment?

A. Yes, sir, and this foreman, I think, so understood it, but, as I said, he used the stick for convenience.

Q. 50. Who was this foreman?

A. His name was Mr. Allen. I do not know his initials.

Q. 51. Did you have any conversation with him in regard to the use of the roller without the belt?

A. Yes, sir.

Q. 52. To what extent?

A. I simply asked him the question whether in the course [620] of his use of these machines he had had the belts break on the rollers at any time, or any other stoppage of the driving of the rollers and if so, what the results were, and he stated that, of course—

Mr. ACKER.—We object to what Mr. Allen stated, as hearsay evidence.

A. (Con.) Where the belts would break occasionally, he always made it a point to repair them as soon as he could get at it, but that this nondriving of the roller did not necessitate stopping the machine until the belt could be fixed, as the machine

(Deposition of Fred Stebler.)

would continue to operate commercially pending his convenience.

Q. 53. What, Mr. Stebler, is the reason for using a moving or rotating member as one side of the fruit run-way in an orange grader?

A. To prevent pinching the fruit.

Q. 54. Will you explain a little more what you mean by preventing pinching the fruit?

A. Well, in all fruit graders of this type, having a traveling longitudinal conveyor, the object of which is to carry the fruit longitudinally along the machine, the action of this conveyor, or rather the action of the fruit on the conveyor is through the mere force of gravity itself to wedge under or between this traveling conveyor and the opposing member. I suppose the correct way to state it would be this: The conveyor being in contact with only one side of the oranges, tends to roll them lengthwise of the machine and naturally this rolling motion if carried far enough must either crush the fruit in its [621] attempt to work down and under or between the grading members or something else has to give way, but the rotative motion imparted to it by a rotating member in opposition to the traveling conveyor tends to prevent this crowding or pinching, hence, either a positively driven rotative member or a member free to rotate through this squeezing action itself is necessary.

Q. 55. In both the device of the patent in suit as you have manufactured them for years, and in the Parker machine, used by defendants, the traveling

(Deposition of Fred Stebler.)

belt is arranged below the center of the axes of the rollers, is it not?

Mr. ACKER.—We object to that as leading.

A. No, while this is true in the Parker machine, it has not been the practice with us.

Q. 56. Where, in the machine of the patent in suit, as manufactured by you, do the oranges bear on the rollers with relation to the axes of the rollers?

A. On the side next the traveling belt.

Q. 57. I mean with respect to the axes. Is the point of bearing above or below the center of the axes?

A. Well, that depends on the point on the machine. The larger the fruit, of course, the higher it will ride on the rollers, so that until the fruit is about ready to drop through the aperture, it is bearing on the roller above its axis, that is when considered in a horizontal plane.

Q. 58. And what is the tendency of the longitudinal traveling of the belt with respect to the oranges resting on the roller? [622]

A. The tendency, of course, is to wedge the oranges in between the belt and the roller.

Q. 59. Is the tendency to force the orange down or up?

A. The tendency is to force the orange down, of course.

Q. 60. That depends, does it not, upon the position of the oranges on the roller?

A. Well, the extent of that force depends on the position of the oranges on the roller.

(Deposition of Fred Stebler.)

Q. 61. Why, then, if the tendency is to force the orange down, why does not the roller tend to rotate downward when it has no belt on it?

A. Because the pressure of the orange is above the axis of the center of the roller.

Q. 62. And in practical operation, according to your observation, this tendency results in the rotation of the rollers, where no belt is used?

A. Yes, sir.

Q. 63. And that rotation was upward and away from the belt? A. Yes, sir.

Q. 64. Is that also true of the defendant's grader?

A. Yes, sir.

Q. 65. Did you observe in the Riverside Heights Orange Growers' Association's packing-house, at Riverside, on June 12th, 1912, any tendency of the oranges to pinch between the belt and the rollers?

A. Yes, sir.

Q. 66. To what extent?

A. To the extent that it rotated the rollers. [623]

Q. 67. Was it apparent whether there was more or less pinching than in the device of the patent in suit then when the rollers were power driven?

A. Well, I think it was more.

Q. 67. What reason have you for continuing to provide the rollers of the patent in suit with the belt means for positively rotating the rollers?

Mr. ACKER.—By the use of the word "continuing," Mr. Lyon, in your last answer, do you mean to imply that the complainant, at any time, ceased

(Deposition of Fred Stebler.)

to supply the machines with the drive means referred to?

Mr. LYON.—Let the witness answer counsel's question.

Mr. ACKER.—I am asking counsel, not the witness.

Mr. LYON.—Let the witness answer the question.

WITNESS.—Shall I answer your question, Mr. Lyon, or his question?

Mr. LYON.—Answer his question.

A. We have always built them with the power driven rollers.

Q. 68. Now, answer my question with regard to the reason for so doing.

A. We prefer to employ this means for the reason, if for no other reason, that it takes away the excessive friction or pressure on the oranges necessary to turn the rollers. As a whole, we are positive that the power or positive driving of these rollers reduces to the minimum all tendency to pinch the fruit.

Q. 69. Then, if I understand your answer correctly, based upon your experience, the positively driven roller is [624] superior in its action?

A. Yes, sir, I so testified.

Q. 70. But that is not a necessity in either the commercial or mechanical operation of the machine?

A. No, not necessary.

Q. 71. I show you Defendants' Exhibit "Woodward Patent," being letters patent of the United States number 466,817, dated January 12, 1892, and will ask you if you are familiar therewith?

(Deposition of Fred Stebler.)

A. I am.

Q. 72. And also Defendants' Exhibit "Cerruti Patent," being letters patent of the United States number 534,783, dated February 26, 1895, and ask you if you are familiar therewith? A. I am.

Q. 73. What machine or devices do these patents illustrate?

A. They illustrate the so-called rope grader or sizer.

Q. 75. Have you ever had any connection with the manufacture of such sizers? A. Yes, sir.

Q. 76. To what extent and when?

A. I acquired the rights of these patents in 1899 and have manufactured a great many of them since that time.

Q. 77. Prior to the time then that you acquired the title to the Defendants' Exhibit "Ish Patent," being letters patent number 458,422, dated August 25, 1891, you had obtained these two patents, Defendants' Exhibits "Woodward Patent" and "Cerruti Patent"? A. Yes, sir. [625]

Q. 78. And that was prior, of course, to the time that you acquired the patent in suit? A. Yes, sir.

Q. 79. Did either of these patents ever give you any suggestion in making the device of the patent in suit? A. No, sir.

Q. 80. The devices of these patents, Defendants' Exhibit "Woodward Patent" and "Cerruti Patent," have been substantially displaced in the market by the device of the patent in suit, have they not?

A. Yes, sir.

(Deposition of Fred Stebler.)

Q. 81. Were there any means, Mr. Stebler, in either of these patents, Defendants' Exhibit "Woodward Patent" or Defendants' Exhibit "Cerruti Patent," for independently adjusting the individual grades of fruit? A. No, sir.

Q. 82. I show you Defendants' Exhibit "Ish Patent," being letters patent of the United States number 458,422, and ask you if you are familiar therewith? A. Yes, sir.

Q. 83. I believe you and your partner, Austin A. Gamble, brought suit in the United States Circuit Court in the Southern District of California, Southern Division, against the H. K. Miller Manufacturing Company on that Ish patent? A. Yes, sir.

Q. 84. And secured a decision sustaining same? A. Yes, sir.

Q. 85. As to the first, second, third and fourth claims? [626] A. Yes, sir.

Q. 86. Are there any means shown in this Ish patent for separately and independently adjusting the several grades of fruit? A. No, sir.

Q. 87. The roller must be adjusted as a whole, if it is adjusted at all? A. Yes, sir.

Q. 88. This is the patent on what has been referred to in the testimony as the California grader?

A. Yes, sir.

Q. 89. Did this patent, taken alone, or in connection with either the Cerruti patent or Woodward patent, suggest to you, while you were manufacturing the device of either of such patents, the independently adjustable individual roller? A. No, sir.

(Deposition of Fred Stebler.)

Q. 90. The suit on the Ish patent, to which I have referred was in 1904, was it not? A. I think so.

Q. 91. Decided along in the spring of 1905 by Judge Wellborn?

A. It was about that time. I couldn't remember the date exactly now.

Q. 92. And at that time you were familiar with all of the patents which have been offered in evidence by the defendants herein, were you not? I hand you a list of them so that you can tell.

A. Yes, sir. [627]

Q. 93. And had been for some considerable time prior thereto?

A. Yes, sir. I have studied them, I think all of them.

Q. 94. While you were manufacturing the California grader Defendants' Exhibit "Ish Patent," you were familiar with Defendants' Exhibit "Ellithorpe Patent," being letters patent number 399,509, dated March 12, 1889? A. Yes, sir.

Q. 95. Did this patent, in connection with the Ish patent or any of the others that I have referred to, suggest the independently adjustable individual roller grader to you? A. No, sir.

Q. 96. You were familiar, prior to 1901, with the Jones patent, Defendants' Exhibit "Jones Patent of 1894," being letters patent number 529,032?

A. Yes, sir.

Q. 97. Did that patent suggest to you the independently adjustable individual roller construction of the patent in suit? A. No, sir.

(Deposition of Fred Stebler.)

Q. 98. And were you prior to 1901 also familiar with the Defendants' Exhibit "Fleming Patent," being letters patent number 475,497? A. Yes, sir.

Q. 99. Did the construction or mode of operation therein set forth suggest to you the individual adjustable independent roller construction, of the patent in suit? A. No, sir.

Q. 100. Were you, prior to 1901, also familiar with the [628] patent to Maull, Defendants' Exhibit "Maull Patent," being letters patent number 673,127? A. Yes, sir.

Q. 101. Did anything in the description or drawings of said patent suggest to you the independently adjustable individual roller construction of the patent in suit? A. No, sir.

Q. 102. I show you the Jones patent, Defendants' Exhibit "Jones Patent," being letters patent number 430,031, and ask you if you were familiar with that prior to 1901? A. Yes, sir.

Q. 103. Did that patent, or anything connected therewith, either alone or in connection with any of the other patents, suggest to you the independent adjustable individual roller construction of the patent in suit? A. No, sir.

Q. 104. I also show you Defendants' Exhibit "Jones Patent No. 2," being letters patent number 442,288, dated December 9, 1890, and ask you if you were familiar with that patent prior to 1901?

A. Yes, sir.

Q. 105. Did anything in that patent, taken either alone or in connection with any of the other patents

(Deposition of Fred Stebler.)

offered in evidence by defendants suggest to you the independently adjustable individual roller construction of the patent in suit? A. No, sir.

Q. 106. I show you Defendants' Exhibit "Burke Patent," [629] being letters patent number 482,294, and ask you if you were familiar with that patent prior to 1901? A. Yes, sir.

Q. 107. Did anything in that patent, either in the specifications or drawings, suggest to you the independent individual adjustment of the rollers of the construction as illustrated in the patent in suit, either taken by itself, or such Burke patent taken in connection with the others, or any of the other patents offered in evidence by the defendants?

A. No, sir.

Q. 108. I also show you Defendants' Exhibit "Huntley Patent," being letters patent number 538,330, and ask you if you were familiar with that patent prior to 1901? A. Yes, sir.

Q. 109. Did anything in that patent, either in the specifications or the drawings thereof, either alone or taken in connection with any one or all of the other patents introduced in evidence by the defendants, suggest to you the independent roller individually adjustable, of the construction of the patent in suit? A. No, sir.

Q. 110. I show you Defendants' Exhibit "Hutchins Patent No. 2," being letters patent number 465,856, and ask you if you were familiar with that patent prior to 1901? A. Yes, sir.

Q. 111. Did anything in the specifications or

(Deposition of Fred Stebler.)

drawings of this patent, taken alone or in connection with any of the other patents offered in evidence by defendants, suggest to you at any time the independently adjustable [630] individual roller construction of the patent in suit? A. No, sir.

Q. 112. I show you Defendants' Exhibit "Bailey Patent," being letters patent number 671,646, and ask you how long you have been familiar with that patent?

A. I think I noticed this when it first came out, that is when the patent first came out.

Q. 113. That was in 1901?

A. About that time, yes, sir.

Q. 114. Did you ever see a machine like that?

A. Yes, I have. Well, not exactly like that; no.

Q. 114. In what respects was it different or similar?

A. Well, the machine I saw I don't think had the little roller devices on the grading members.

Q. 115. Otherwise it was substantially the same?

A. Yes, substantially the same.

Q. 116. Where did you see such machine?

A. It was in a store here, evidently offered for sale.

Q. 117. That was in what year?

A. Why, I think it must have been along about 1902, somewhere along there, that I saw that machine there.

Q. 118. Do you know whether any such machines were sold or placed in use?

A. I never saw one in use.

(Deposition of Fred Stebler.)

Q. 119. Do you know whether any of them were ever installed? A. No, sir.

Q. 120. You say they were offered for sale here in Los Angeles? [631]

A. I said I saw it in a store here, standing among a lot of other machinery, which by the way, was a machinery store, then conducted by a man named Wickson, in which he had for sale all kinds of implements, principally pertaining to products of the soil. In addition to this particular orange sizer he had two others and garden tools and minor details and such like, and while I did not question anyone in the store, I assumed, from the fact that it was there on exhibition, evidently a complete machine, it was offered for sale.

Q. 121. In your various trips throughout the orange packing industry throughout California, have you ever seen, in any packing-house, a machine like this patent, Defendants' Exhibit "Bailey Patent"?

A. No, sir; I have never seen or heard of anything like that being used.

Q. 122. Was it in 1902, according to your best recollection, that you first saw them?

A. About that time.

Q. 123. Was that prior, or subsequent, to your acquisition of the patent in suit?

A. I think it was subsequent to my acquisition of the patent in suit.

Q. 124. What would you say as to the commercial practicability of a device constructed in accordance

(Deposition of Fred Stebler.)

with Defendants' Exhibit "Bailey Patent"?

A. Well, speaking from my knowledge and experience in this line, I would say that, while it might be possible to use the machine, yet I don't believe it could ever be made a commercial success. [632]

Q. 125. What reason have you for such conclusion?

A. Well, the construction of the machine is such, as it is shown in this patent, as to make the use of it on any kind of fruit, other than potatoes, or something that has a very hard rind on it, so detrimental to the fruit as to be almost suicidal.

Q. 126. What do you mean by "almost suicidal"?

A. I believe that fruit run through this machine, unless it was as hard as billiard-balls, that it would be ruined.

Q. 127. Why?

A. Well, the device as shown here would masticate the rind, injuring it to such extent that it would be unmarketable, and if the rollers were not used, the chances are it would be crushed or injured to such an extent as to be unmarketable.

Q. 128. If the rollers were used, what have you to say in regard to it?

A. The sharp edges of this device, presented against the rind of the fruit, would undoubtedly puncture the rind and cut it.

Q. 129. What have you to say regarding the probable capacity of a machine of this construction?

A. The capacity would be entirely too small for any orange packing-house.

(Deposition of Fred Stebler.)

Q. 130. Why?

A. Because they could not get fruit enough through it to make it worth while, for they couldn't get packers enough around it to pack up a car and get it ready for market in sufficient time to be commercially practical. [633]

Q. 131. Would such a machine occupy more or less space than a machine of the construction of the patent in suit?

A. As shown here it would take less space than the patent in suit.

Q. 132. Supposing such a machine were built of the requisite size to grade ten grades of fruit, would it occupy greater or less space than a machine of the construction of the patent in suit?

A. Well, a machine built on the lines laid down in this patent, large enough to procure the equivalent in space, including bins, of one of the patent in suit, would be unwieldy and would be impractical as to construction and maintenance.

Q. 133. I show you copy of Letters Patent number 726,756, dated April 28, 1903, to Charles Rayburn, for Fruit Grader, the same forming part of Defendants' Exhibit "File-Wrapper Rayburn Application for Letters Patent," and ask you if you are familiar with this patent? A. Yes, sir.

Q. 134. How long have you been familiar with it?

A. I came in contact with this patent before it was issued in an interference proceeding between it and the patent in suit.

Q. 135. Then the interference between the Re-

(Deposition of Fred Stebler.)

issue Application *or* Robert Strain, referred to in the Bill of Complaint, and the application of Charles Rayburn, was in relation to this patent number 726,756? A. It was.

Q. 136. Do you know who now owns whatever title there may [634] be left in this Rayburn patent? A. I do.

Q. 137. Who owns it? A. Myself.

Q. 138. And when did you acquire it?

A. At the termination of this interference proceeding.

Q. 139. That was in 1905?

A. About that time, yes.

Q. 140. Mr. Stebler, some of the witnesses for defendants in this suit have referred to an overhead system. Do you know anything about such a system? A. Yes, sir.

Q. 141. Was that also covered by the patent to Rayburn? A. Yes, sir.

Q. 142. You acquired it at the same time that you acquired the Rayburn patent last referred to?

A. Yes, sir.

Mr. LYON.—If you want to know the exact date, it was June, 1905. I have the original assignments here if you want them.

Mr. ACKER.—I do not care to see them. I only wanted to know about the date.

Q. 143. What was the construction of such an overhead system?

A. Merely as a distributing means from the sizer.

Q. 144. To what extent were such overhead sys-

(Deposition of Fred Stebler.)

tems in use?

A. There were quite a number of them put into use when it first came out, but it was found they were impractical and the use has been discontinued.
[635]

Q. 145. Based upon your experience, both in the commercial use and in the manufacture of fruit graders, would it be practical to utilize a grader in which one side of the fruit run-way was composed of a moving belt and the other a stationary grading member? A. No, sir.

Q. 146. Upon what do you base such conclusion, Mr. Stebler?

A. On the theory that I advanced previously in this present hearing in answer to a question—on the ground that the action of the conveyor carrying the fruit through the machine and rolling it against the stationary opposing member tends to work it in, wedge it in and crush it.

Q. 147. Do you know of any commercial trial of any such machine?

A. Yes, I have made experiments along that line myself to satisfy me of that fully.

Q. 148. Have you any personal knowledge of any commercial attempt to use any such machine?

A. Yes, sir. Mr. Stevenson, of Riverside, undertook to construct a machine along that line and failed.

Q. 149. I show you a photograph and ask you if you know what that represents?

A. That represents Mr. Stevenson's first machine.

(Deposition of Fred Stebler.)

Q. 150. That is a true photograph of it?

A. Yes, sir.

Q. 151. That is the machine you referred to in your previous answer? A. Yes, sir.

Mr. LYON.—We ask that this photograph be marked “Complainants’ [636] Exhibit “Steven-son Machine,” and offer it in evidence.

Mr. ACKER.—We object to the introduction of the exhibit as incompetent, irrelevant and immaterial.

Q. 152. And where, Mr. Stebler, was this machine commercially tried?

A. In the packing-house of Worthley and Strong Fruit Company, at Riverside.

Q. 153. What became of the machine?

A. The machine in its modified form is still there.

Q. 154. What modification was made in it?

A. The stationary opposing member had to be discarded and a rotating member substituted.

Q. 155. Was that rotating member power driven?

A. Yes, sir.

Q. 156. The stationary members that you refer to are indicated in this photograph and shown therein at the sides of the belt?

A. And slightly above it.

Q. 157. You are familiar with the defendants’ machine, are you not? A. Yes, sir.

Q. 158. Will you please compare the elements of this machine, so far as the grading of the fruit is concerned, with the defendants’ machine. (Refer- ing to machine shown in Complainant’s Exhibit

(Deposition of Fred Stebler.)

“Stevenson Machine.”)

Mr. ACKER.—Objected to as incompetent, irrelevant and immaterial, as not tending to prove any of the issues of this controversy.

A. This machine (referring to machine of Complainant's [637] Exhibit “Stevenson Machine”), the traveling member, or belt, seems to be identical with the defendants' machine, but there is here shown, instead of the independent rollers or rotating members in the defendants' machine, a stationary or approximately rigid member in the grade-way, in opposition to the traveling belt.

Q. 159. Were these rigid members in the original Stevenson machine independently adjustable?

A. Yes, sir.

Q. 160. Where is that adjustability shown in the photograph?

A. By bolts and so forth shown at the top as the adjusting means.

Q. 161. There being one at each end of each rigid roll or bar? A. Yes, sir.

Q. 162. You say that they were compelled to substitute for such rigid and nonrotating member a rotating member? A. Yes, sir.

Q. 163. Why?

A. Because the machine, when put to the commercial test proved a failure with the rigid members in opposition to the belt for the reason that fruit would squeeze in between the belt and the rigid member so as to crush the fruit or remove the belt from its supporting element.

(Deposition of Fred Stebler.)

Q. 164. In what way did it remove the belt from the supporting element, or tend thereto?

A. Crowded it off, pushed it upward above the apex of [638] the angle over which it traveled or out from under the fruit.

Q. 165. Now, referring to defendants' machines and particularly those which you saw on June 12th, 1912, at the Riverside Heights Orange Growers' Association packing-house at Riverside, while in commercial use, I believe you stated that the first few rollers were in continuous rotation?

A. Yes, just as long as there was any fruit running past them.

Q. 166. Based upon your experiences in the manufacture and use of fruit graders and also the experience of parties with this Stevenson machine, like illustrated in Complainants' Exhibit "Stevenson Machine," are you able to state whether or not the particular machines or similar machines would be a commercial success without such rotating rollers?

Mr. ACKER.—Objected to as incompetent, irrelevant and immaterial.

A. It would not be a success without some rotating means to prevent the pinching of this fruit between the traveling belt and the opposing member.

Q. 167. The flat belt instead of the round rope belt which is shown in the drawings of the patent in suit, is shown, in the Defendants' Exhibit "Ish Patent," is it not, as a part or member of, the fruit run-way?

A. Yes, sir.

Q. 168. And was known as a mechanical equiva-

(Deposition of Fred Stebler.)

lent for the round belt when you first entered the field of manufacture of fruit graders in 1889 or 1890?
[639]

A. So far as myself was concerned, yes, but the fact that a belt is round or flat, so long as it is a belt or runs over pulleys, it is always a belt in mechanics.

Q. 169. Some questions were asked the witnesses on behalf of defendants as to the presence of a grooved guide for the belt in the defendants' machines. Have you examined the machines in the Riverside Heights Orange Growers' Association at Riverside, since the giving of such testimony by defendants' witnesses and with relation to such fact?

A. Yes, sir.

Q. 170. What did you find?

A. There is a groove at the apex of the angle or ridge over which this belt travels and which is so constructed as to enable it to act as a guide for this traveling belt.

Q. 171. Is the member in which such grooved guide is present, a movable or nonmoving member?

A. It is a nonmoving member.

Q. 172. And what, Mr. Stebler, is the purpose in these machines of the defendants' construction, of the use of such guide and groove?

A. Ostensibly it is there as merely a relief or depression for the chain, which is fastened to the center of this belt to run in, but I think mechanically it has the purpose of serving as a guide to keep this traveling belt in alignment over the ridge or apex

(Deposition of Fred Stebler.)

of this nonmovable support over which the belt travels.

Q. 173. Why do you give that as your conclusion or opinion? [640]

A. For the reason that unquestionably if there was no such groove there or chain running it to which the belt it attached, the belt would, of its own accord, get out of alignment, that is, it would hang over farther on one side than the other, which tendency would be increased, for instance, if it was unequally loaded, that is, if one side of the belt were carrying a load and the other side were not, on the double grade-way machine the tendency would be, if this groove and guide were not present, for the belt to work over and up from under the fruit, this would be particularly true in the single grade-way machine.

Q. 174. The belt in the device of the patent in suit runs in a grooved guide, does it not? A. Yes, sir.

Q. 175. What is the object of the grooved guide in the nonmovable member of the device of the patent in suit?

A. To hold the belt up in proper alignment and carry the pressure of the fruit against it.

Q. 176. Will you compare the function of that grooved guide with the belt of the construction of the patent in suit with the grooved guide which you have referred to in the defendants' machines?

A. The functions are identical.

Q. 177. And as to the manner of performing the functions? A. That is also identical.

Q. 178. Then I am correct in stating that the

(Deposition of Fred Stebler.)

grooved guide in both the machine of the patent in suit and in [641] defendants' machines are substantially the same and perform their functions in substantially the same manner? A. Yes, sir.

Q. 179. You have heard the testimony of George D. Parker, the defendant, and the testimony of Mr. Cobb, who was called as an expert on behalf of defendants, have you not? A. Yes, sir.

Q. 180. What have you to say in regard to their testimony in regard to the defendants' machines not embodying end-to-end rollers?

A. Personally, I can't see their ground for that statement.

Q. 181. Having heard both the testimony of Mr. Parker and Mr. Cobb and their reasons for their testimony, do you agree or disagree with their statement that the defendants' machines do not contain end-to-end rollers?

A. I certainly disagree with them.

Q. 182. And you see nothing in their testimony to cause you to change the conclusion which you have reached that defendants' machines contain end-to-end rollers?

A. No, sir, I see nothing in their testimony to convince me of the correctness of their position.

Q. 183. What percentage of the California graders have been replaced?

A. Practically all of them.

Q. 184. And by what have they been replaced?

A. With machines of the independent adjustable roller.

(Deposition of Fred Stebler.)

Q. 185. Manufactured under the patent in suit?

A. Either that or manufactured by the defendant.
[642]

Q. 186. You have heard the defendants' statement as to the number of machines he has manufactured?

A. Yes, sir.

Q. ——. During the same period of time, how many of the machines of the patent in suit have you installed?

A. I can recall a hundred and fifteen.

Q. 187. George D. Parker is your principal competitor in this line of business? A. Yes, sir.

Q. 188. You have noticed the statement in the testimony of Mr. George D. Parker that in the defendants' machines each roller formed a distinct and separate sizer. Do you agree with that statement?

A. No, sir.

Q. 189. Why not?

A. Well, I take it when he made that statement that he meant a separate and distinct sizing machine, which is obviously impossible, if the statement was to be taken literally, and also that each grading roller is a sizer by itself is meant that it is a sizing element by itself, is no more true than it is in my machine or any other machine.

Q. 190. In other words, any grader that will grade the fruit into two sizes only, one going through the apparatus and the other over the end of the machine, would be, in the meaning of your last answer, a fruit sizer? A. Yes, sir.

Q. 191. And each roller of the patent in suit would

(Deposition of Fred Stebler.)

be a distinct sizer? [643]

A. No, it would not be a distinct sizer, it would be a distinct sizing element.

Q. 192. Assuming that Mr. Parker meant a distinct sizing element, then each roller of the patent in suit would be a distinct sizer in the same sense?

A. In the same sense, yes.

Q. 193. You have heard the testimony in regard to the longitudinal adjustment of the rollers in the defendants' machine and have noticed such machines in operation. What have you to say in regard thereto?

A. Well, while it is possibly a fact that the rollers are longitudinally adjustable, I fail to see any great advantage in this, for the reason that this adjustment is quite limited so far as results are concerned.

Q. 194. Mr. Parker in his testimony has stated that they get fifty per cent more bin-room with the defendants' sizer. Have you made any observation in regard to that fact?

A. Well, that statement is in error.

Q. 195. Why?

A. Well, assuming that his machines are the same length as mine, and they usually are approximately, that would be impossible for the reason that they are almost as wide as mine are.

Q. 196. Then, practically there is no difference in the bin-room?

A. There may be some difference, but not fifty per cent.

Q. 197. To what extent?

(Deposition of Fred Stebler.)

A. Well, I haven't measured his bins to know their exact [644] width, and looking at them, of course, I can see that they are a little narrower than mine, but it could not be more than twenty-five per cent, I don't think.

Q. 198. It has been shown in evidence, Mr. Stebler, that you own both the patent for the California sizer, Defendants' Exhibit "Ish Patent," and the patent in suit. What effort, if at all, did you make to replace or discontinue the sale of the California sizers?

A. As a matter of fact, the patent on the California sizer has run out and has been for a year or two, but prior to that I made absolutely no effort to influence the customer in any manner whatever. In fact, I would prefer to make the California sizer as a matter of cost to me. Of course, in consulting a customer's welfare, and knowing the advantages in favor of the independent roller machine, I could not influence him either way beyond explaining the merits of the two machines and in letting him take his own choice remembering, of course, that the machine with the independent adjustable rollers would cost him probably twice as much as the California grader, and almost invariably when I had occasion to make this explanation to a customer, he chose the more expensive machine.

Q. 199. Do you know the reason for such choice?

A. Because he knew it was much the best.

Q. 200. And due to what?

A. Due to the independently adjustable rollers

(Deposition of Fred Stebler.)

and means by which he could vary the sizes, which he could not do in the older machine. [645]

Q. 201. Is this independent adjustability of the rollers used in the commercial grading of oranges?

A. It is of the utmost importance and is used every day, more or less in every machine.

Q. 202. You have heard the testimony of some witness, I think Mr. Parker himself, who stated that this individual adjustment is seldom used? Do you agree with that statement? A. No, sir.

By consent the taking of the depositions was at this point continued to meet at the office of the clerk of the United States District Court, in Los Angeles, California, at two o'clock P. M. of the same day.

At the office of the clerk of the United States District Court, in the Federal Building, in the City of Los Angeles, California, pursuant to the above continuance, and with those persons present as noted at the beginning of the taking of these depositions, and at the hour of two o'clock P. M. of the same day, the following proceedings were had:

FRED STEBLER, recalled as a witness in his own behalf, testified as follows, to wit:

Direct Examination (Con.).

(By Mr. LYON.)

Q. 203. Mr. Stebler, look around you and see if you can produce an illustrative model which will illustrate the device of the patent in suit, illustrated both with and without the individual belts for driving the rollers? A. Yes, sir. [646]

Mr. LYON.—We ask that the device produced by

(Deposition of Fred Stebler.)

the witness be marked "Complainants' Exhibit Illustrative Machine," and offer the same in evidence.

Q. 204. I notice, Mr. Stebler, that this device which you have produced shows two longitudinally moving ropes on one side of which are a series of rollers having driving belts, each of these rollers being individually adjustable toward and from the rope. Is that portion of the machine in compliance with the specifications and drawings of the patent in suit? A. Yes, sir.

Q. 205. And is this machine an operative size?

A. Except for length it is, yes.

Q. 206. You mean the length of the rollers?

A. Total length of the machine and length of the rollers.

Q. 207. As far as the diameter of the rollers is concerned, is it full sized? A. Full sized; yes.

Q. 208. On the opposite side of this illustrative machine, I notice that there are mounted three rollers loosely mounted to rotate, but having no belt for rotating them. What does this illustrate?

A. Those illustrate the grade-way the same as on the belt-driven side, except that the rollers are not belt-driven.

Q. 209. The grooved guide that we have been referring to is the groove in which the belt lies, in this illustrative machine?

A. In which the longitudinal belt lies, yes.

Q. 210. And the purpose, you say, of this device is to simply form a guide and rest for the belt and keep the [647] belt from being forced out of posi-

(Deposition of Fred Stebler.)

tion? A. Yes, sir.

Q. 211. I now call your attention to a second model and ask you if you know what it is?

A. Yes, sir.

Q. 212. What is it?

A. That is a model or exhibit used in a suit which I was plaintiff against the Pioneer Fruit Company a year ago.

Q. 213. Suit number 207 of the Northern Division of the Southern District of California, wherein Fred Stebler was plaintiff and the Pioneer Fruit Company was defendant, in regard to which suit we have heretofore offered in evidence the Findings of Fact and Conclusions of Law? A. Yes, sir.

Q. 214. And this is the original model of the defendants' machine in that case which was before the Court in that suit? A. Yes, sir.

Mr. LYON.—We offer this in evidence and ask that it be marked Complainants' Exhibit "Model of Defendants' Machine in Pioneer Fruit Company Case."

Mr. ACKER.—The introduction of the exhibit is objected to as incompetent, irrelevant and immaterial and as not within the issues of the present controversy.

The cross-examination of Mr. Stebler as to the model exhibits was taken at this time for the convenience of the parties with the understanding that the direct examination of Mr. Stebler as to other matters is not [648] closed.

(Deposition of Fred Stebler.)

Cross-examination.

(By Mr. ACKER.)

XQ. 1. Referring to the Complainants' Exhibit "Illustrative Machine," Mr. Stebler, only three of the rollers constructed as described in the patent in suit are shown, is that not true?

A. Three of the rollers on one side, yes.

XQ. 2. Being the first three rollers on the right-hand side as I now stand opposite the machine?

A. Yes, sir.

XQ. 3. What would be the effect, Mr. Stebler, if I should make the first, second and third of these mechanically driven rollers of two diameters?

A. The effect would be that you would—the effect would be that, so long as you maintained the individual adjustment, practically immaterial.

XQ. 4. Then, I would have three graduated rollers or stepped rollers?

A. No, you would not have stepped rollers in that sense, no, sir.

XQ. 5. What is the approximate diameter of the rollers as they there appear?

A. Three and a half inches.

XQ. 6. Supposing I should make the second of those rollers of three and a quarter inch diameter, would that give me a stepped roller? A. Yes, sir.

XQ. 6. Supposing I should make the others of the three [649] quarter-inch diameter?

A. You probably would; yes, sir.

XQ. 7. Would I or would I not?

Mr. LYON.—The question is objected to on the

(Deposition of Fred Stebler.)

ground that it is indefinite and uncertain as to what counsel has in mind in the question, the construction not being clear as to whether he intends to give each separate roller two diameters or more.

XQ. 8. Assuming that you expect to maintain the rollers in approximately the same relative positions as they are now, you would? A. Yes, sir.

XQ. 9. In that case I would have a series of end-to-end stepped rollers? A. You would, yes.

XQ. 10. And for the purposes of your patent, it would not make any difference whether the individual rollers are stepped rollers or rollers of uniform diameters? A. Oh, yes, it would.

XQ. 11. Now, if I make the rollers of stepped form, would you consider them to be in the scope of the patent at all?

A. They might be in the scope of the patent, but they would not be individually adjustable rollers, one for each sized fruit. By this I mean that you would get two sizes of fruit on each roller, which would not be independently adjustable.

XQ. 12. But would you consider a sizer one member of the run-way of which consisted of a series of end-to-end [650] stepped rollers to be within the claims of the patent in suit?

Mr. LYON.—Objected to as incompetent, being an inquiry as to a question of law and for the Court to determine and not the province of expert testimony, the witness not being qualified to answer the question and not the best evidence—the patent speaks for itself.

(Deposition of Fred Stebler.)

A. I would not undertake to answer that question or say whether it would or would not come under the patent.

XQ. 13. What would be your opinion?

Mr. LYON.—Same objection.

A. I cannot express any opinion on that question without studying it further.

XQ. 14. Supposing the rotating member of the run-way comprised a series of independently adjustable rollers arranged end to end, as appears in the illustrative model, and each roller was made in two or more sections, would you consider such a form of sizer to come within the scope of your patent?

Mr. LYON.—Same objection as noted to the preceding question.

A. I would like to ask you what you mean by “sections” before I answer that question.

Mr. ACKER.—Read the question, Mr. Peck.

(Question read by reporter.)

XQ. 15. By the word “sections” in the preceding question, I mean each roller made in two or more diameters, or of stepped form.

Mr. LYON.—Same objection as noted to the preceding questions.

A. That question is the same as I have objected to [651] answering, and I object to answering that question on the same ground.

XQ. 16. Would the construction as to which I have asked you form a rotating member of the fruit sizer composed of a series of end-to-end rollers with bearings for each roll?

(Deposition of Fred Stebler.)

A. No, I think your question is too indefinite to answer that.

XQ. 17. In what manner is it indefinite?

A. Because in your previous question you have said nothing about bearings for the rolls or how they are to be made or anything of that kind.

XQ. 18. To remove the indefiniteness of the question, I will ask you to picture to yourself a fruit grader, one member of which comprises a series of end-to-end rollers, made in exactly the same manner as the rollers mounted on the right-hand side of the illustrative model appear to be mounted, and each of the rollers being formed of two or more diameters, so as to produce a stepped roller, and I ask whether in your opinion such a constructed sizer would fall within the terms of your patent?

Mr. LYON.—Objected to as incompetent, being a question of law for the Court to determine and not the proper matter for expert testimony, and as incompetent, the witness not having qualified to answer the question.

A. I don't know that I am qualified to answer that.

XQ. 19. I asked your opinion on it.

A. I decline to express an opinion on what I don't understand. [652]

XQ. 20. Why is it that you can express an opinion so freely as to whether the defendants' device comes within the claims of your patent and yet are unable to give an expression of opinion on whether the construction I have referred to does or does not come within the claims of your patent?

(Deposition of Fred Stebler.)

Mr. LYON.—Objected to as not proper cross-examination and as not a true statement of the testimony of the witness.

A. My opinions are not rendered as a matter of prejudice; they are rendered on my own knowledge and understanding.

XQ. 21. From your knowledge and understanding, what would be your opinion as to a series of end-to-end rollers of stepped form made in the same manner as they appear in the illustrative model?

Mr. LYON.—Same objection as noted to the last preceding questions and each of said questions.

A. With respect to what?

XQ. 22. With respect as to whether it comprised a movable member of a fruit sizer composed of end-to-end rollers mounted in bearings, as set forth in the model.

A. I would say it would be a movable member, yes.

XQ. 23. Would it be a movable member comprising end-to-end rollers?

A. The fact that the rollers are stepped does not necessarily prevent their being end-to-end rollers.

XQ. 24. And if they were stepped and arranged end-to-end and mounted in brackets which were adjustable toward and from the movable member, would you consider it to be a sizer comprising one member of which consists of a series of [653] of end-to-end rollers and means for adjusting the brackets of the rollers toward and from the fixed member?

A. Yes, it might fall within that language.

(Deposition of Fred Stebler.)

XQ. 25. You think it might fall within that language?

A. Well, I decline to answer that question with any more definiteness because I think the question is indefinite.

XQ. 26. That is, you are unable to say whether a sizer constructed as the sizer of the illustrative model, only differing therefrom to the extent that the rollers are in stepped form comes within your patent?

Mr. LYON.—Objected to as incompetent, being an inquiry as to which it is the province of the Court to inquire and not a subject of expert testimony.

A. I decline to commit myself definitely as to that.

XQ. 27. Why do you decline to answer, Mr. Stebler? A. I did not say I declined to answer.

XQ. 28. Why do you decline to commit yourself?

A. Because I decline to commit myself on an indefinite question—indefinite to me.

XQ. 29. In what respects?

A. In several respects.

XQ. 30. Mention them, please.

A. In the first place, the mechanical construction as you outlined it is not clear to me as to what you have in mind; in the second place, the machine, as you outlined it, would not be a practical machine, and hence, in my opinion, has no bearing on the question.

XQ. 31. Why would it not be a practical machine?
[654]

A. Because each and every one of these stepped

(Deposition of Fred Stebler.)

rollers which you spoke of would have at least two sizes which could not be controlled independently of each other.

XQ. 32. And that would render it impractical?

A. That makes it an impractical machine.

XQ. 33. I notice you have in the illustrative model only three rollers which are mechanically driven, that is, those appearing on the right-hand side of the model, the fourth roll being provided with no means for driving, and I would ask ordinarily in the construction of your sizer how many rollers have you comprising the rotating member?

A. Do you mean on a single sizer, meaning a single grade-way?

XQ. 34. I mean the single sizer.

A. I supposed you did, but I wanted to make it clear. Meaning a single grade-way, we ordinarily have nine or ten rollers on one side.

XQ. 35. Suppose I cut out rollers, the second third, fourth, fifth, sixth, and seventh rolls of the series and left a roll at one end of the machine and a roll at the opposite end and make a solid wall within the space existing between those rolls, would I then have a sizer, one member of which consists of a series of end-to-end rolls, and would it be a practical sizer for commercial purpose?

Mr. LYON.—Objected to as double, involving two questions in one.

Mr. ACKER.—If it pleases counsel, I will segregate the question. [655]

Mr. LYON.—What does the witness answer?

(Deposition of Fred Stebler.)

A. This question is not clear in that I have no means of knowing what you mean by the solid wall in the space between the rollers at either end of the machine. I will say, though, that assuming that by this solid wall you mean to interpose some form of a nongrading space by simply carrying the fruit by it on the belt conveyor that you would still then have a sizer with end-to-end rollers.

XQ. 36. And would it be a practical machine?

A. No, sir, it would not be a practical machine.

XQ. 37. Why not?

A. For the reason that you could only make two sizes. You would only make two sizes on it.

XQ. 38. It is your idea that you have got to make more than two sizes to be a practical machine?

A. You certainly have in an orange machine.

XQ. 38. Three sizes would not make a practical machine? A. No, sir.

XQ. 39. Then it is only by reason of the fact that you would have two sizes that it would not be a practical machine?

A. So far as the sizing is concerned.

XQ. 40. Would any number of grades short of nine grades be an impractical machine?

A. No, not always. We have built machines that contained only five sizes.

XQ. 41. That was a practical machine, was it not?

A. For the purpose for which it was built, it was special. [656]

Mr. ACKER.—That is all I have to ask, Mr. Lyon.

(Deposition of Fred Stebler.)

Direct Examination (Con.).

(By Mr. LYON.)

Q. 215. I show you an instrument and ask you if you have ever seen it before? A. Yes, sir, I have.

Q. 216. When did you first see it?

A. When it was delivered to me directly after its execution.

Q. 217. Do you know who signed such instrument? A. Mr. Charles Rayburn.

Q. 218. You are familiar with his signature?

A. Yes, sir.

Mr. LYON.—We offer the instrument in evidence and ask that it be marked Complainants' Exhibit "Rayburn Confession of Priority."

Mr. ACKER.—Objected to as incompetent, irrelevant and immaterial and not within the issues of the present controversy.

Q. 219. I show you another instrument and ask you if you have ever seen it before? A. Yes, sir.

Q. 220. When and where?

A. Directly after its execution and delivery to me at Riverside.

Q. 221. These two instruments you have last referred to were delivered to you at the same time?

A. Yes, sir.

X 222. And do you know who signed the last instrument? A. Mr. Charles Rayburn. [657]

Mr. LYON.—We offer this instrument in evidence and ask that it be marked Complainants' Exhibit "Rayburn Assignment."

Mr. ACKER.—Same objection.

(Deposition of Fred Stebler.)

Q. 223. Calling you attention, Mr. Stebler, to the testimony of defendants' witnesses with regard to the longitudinal adjustment of the grading rollers of the defendants' machine, I will ask you to state if the same general result is secured in any manner in the device of the patent in suit.

Mr. ACKER.—Objected to on the ground that the patent itself is the best evidence and speaks for itself on such point.

A. As I understand the purpose of the longitudinal adjustment of the independent rollers in the Parker machine, it is to shift with any given roller that particular size of fruit which it makes longitudinally of the machine for the purpose of changing the distribution of the fruit leaving the sizer. I will say that the same thing could be accomplished in the patent in suit by changing the rollers so as to shift the fruit to another roller.

Q. 224. In other words, by closing in a given roller so that the grade-way formed thereby is not wider than the grade-way of the next roller, in front of it, is that it?

Mr. ACKER.—Objected to as leading.

A. Yes, sir.

Q. 225. I now show you Defendants' Exhibit "Hutchins Patent," being letters patent number 456,092, dated July 14, 1891, and ask you if you have ever seen that [658] patent before?

A. I have seen this patent.

Q. 226. Are you familiar with such patent?

A. Yes, sir.

(Deposition of Fred Stebler.)

Q. 227. How long have you been familiar with it?

A. I cannot say just how long, but I will answer that question in this way: that almost from the beginning of my launching in this business I have studied the records of the Patent Office with a view of finding out what they disclosed in the way of sizing machines, and I remember that in the course of my search I ran on to this patent among others.

Q. 228. Was that prior to the advent of the Robert Strain sizer? A. I think so, yes.

Q. 229. State whether or not anything in this patent, either in the specifications or drawings, taken alone or in connection with the Ish patent, or otherwise, suggested to you the feature or desirability or how to accomplish the result of the individual adjustment of the rollers.

A. The desirability of effecting an independent or individual adjustment of the sizes on a sizer had been apparent to me from the first, but nothing that I have ever seen in this patent or any other patent ever suggested to me how it was to be done.

Q. 230. Then, if I understand your testimony, it was about 1899 that you first entered the manufacture of fruit machinery in Southern California?

[659] A. Yes, sir, in July.

Q. 231. And that was the time that you refer to that you began your investigation of the records of the patent office? A. Directly after that.

Mr. LYON.—You may inquire, Mr. Acker.

(Deposition of Fred Stebler.)

Cross-examination.

(By Mr. ACKER.)

XQ. 42. Please examine the reissue of the patent number 12,297, of the patent in suit, and point out by said letters patent wherein the provision is made to accomplish the result brought about by the longitudinal adjustment of the rollers of the defendants' machine.

A. Beginning with line 13, to 16, page 2.

XQ. 43. That is beginning with the word "by"?

A. Beginning with the word "by," which reads: "By having short grade-rollers separately adjustable, very fine grading may be done and more than one roller may be adjusted to the same grade, if desired."

XQ. 44. If you adjust more than one roll to the same grade of fruit you would cut out one grade of fruit, would you not? A. Not necessarily.

XQ. 45. Why not?

A. What he means by this is that you may have a multiplicity of rolls and that two or more of them may be set to the same size.

XQ. 46. How do you know that is what the patentee means? [660]

A. That is the way I read it. Anyone familiar with the orange packing business would read it that way.

XQ. 47. Have you ever made machines of this patent with two rollers of the same grade?

A. Yes, sir.

XQ. 48. Where and when?

(Deposition of Fred Stebler.)

A. I recall one that went to Butte County.

XQ. 49. Where, what packing-house?

A. I can't recall the party's name, but I can get it for you if you want it, from my books.

XQ. 50. This is the first time you have referred to that in any of your testimony?

A. I do not recollect as to that point.

XQ. 51. What would be the reason for having more than one roller adjustable to the same grade?

A. To shift that very size.

XQ. 52. What very size?

A. Shift your fruit along lengthwise to the bin, shift your size.

XQ. 53. Please be a little more explicit as to what you mean by that.

A. Well, it is plain enough right here, here in the specifications. The lines I have referred to. You simply set one or more rollers for the same size.

XQ. 54. Why do you place an interpretation on that language that it means two rolls for the same grade rather than it means relatively short rolls for the entire grade-way?

A. There can be no other object to having relatively [661] short rolls for the entire grade-way than in getting an independent roller in such a way that you can place your size wherever you want it.

XQ. 55. What do you mean by the expression that from what you understand that is meant by having short grade rollers separately adjustable very fine grading may be done?

A. That means that he can get a better control

(Deposition of Fred Stebler.)

over his sizes.

XQ. 56. You mean short rollers for each size?

A. What he means by having short rollers is that he can get them wherever he wishes by having them independently adjustable. He can close them up or widen them and get them where he wants them, more so than if he had long rollers.

XQ. 57. Is there any disclosure in the drawing of more than one roller for a grade?

A. The drawing is not clear on that.

XQ. 58. Now, reading between lines 75 and 80 on page 1, does not the patentee state in that language that there is a roller for each grade?

A. Not necessarily.

XQ. 59. Does he not say that the first roller is for the smallest grade and the next roller is for the next larger grade, and so on for each successive grade? A. He says it is so adjusted.

XQ. 60. Doesn't that imply that they do?

A. No, sir, not necessarily.

QX. 61. What does the language to your mind, that I refer to, imply? [662]

A. The language to my mind implies that you could set it so if you wished, but not necessarily have to use it so.

XQ. 62. Doesn't he say that in the operation of my machine the first roller is so set and the second roller and the third roller and the fourth roller, and so on?

A. He says it is adjusted. Adjustment means the will of the operator.

(Deposition of Fred Stebler.)

XQ. 63. When did you first meet Mr. Allen, the foreman of the Stewart packing-house and have explained to you by said party the use of the filler sticks by practical demonstration?

A. On June 12th, 1912.

XQ. 64. Was that the first time you had ever seen the filler sticks in practical operation?

A. No, sir.

XQ. 65. When did you first see the filler sticks in operation?

A. I can't recall when they were first called to my attention.

XQ. 66. What do you mean by first called to your attention? A. I had known of them before.

XQ. 67. When did you first see them in practical operation?

A. I tell you I can't tell you exactly when it was.

XQ. 68. About when?

A. I think it was soon after those machines were installed there and they have been there about four or five years. [663]

XQ. 69. About 1907 or '8?

A. My last answer is as near as I can get.

XQ. 70. And at that time you saw the filler sticks in operation? A. Yes, sir.

XQ. 71. And personally examined them?

A. No, I did not personally examine them at that time. Mr. Beatty, the house manager, called my attention to them and the fact that he was using them and told me what he used them for.

XQ. 72. Yes, but you did not see them in prac-

(Deposition of Fred Stebler.)

tical operation?

A. Yes, I saw them in practical operation at that time, but I did not make a personal examination of them at that time.

XQ. 73. Of what extent was your observation?

A. Simply passing the machine and seeing them in place; placed practically as shown me in my last examination.

XQ. 74. That is the filler sticks were employed to fill the run-way in certain positions?

A. And prevent the oranges from passing through.

XQ. 75. In other words, the filler sticks formed a bottom for the run-way?

A. In one sense, yes.

XQ. 76. Is that correct?

A. I don't know that it is correct in the sense that you *it in*.

XQ. 77. What sense did I mean it in? [664]

A. I don't know. That is the trouble.

XQ. 78. If you don't know what sense I meant it in how can you say that it is not, in the sense I meant it? How do you use that expression?

A. What expression do you refer to?

XQ. 79. In the sense in which I mean it.

A. That question is not clear to me.

XQ. 80. In what sense do you believe that I employ the term that it forms a bottom for the run-way?

A. I have formed no opinion or belief as to what you mean and have no means of knowing what you mean.

(Deposition of Fred Stebler.)

XQ. 81. Hereafter I will ask that you answer the questions with no reference as to what I may mean. I am asking what you mean or what is meant by your testimony. My question is, is it not a fact that the filler sticks form a bottom of the run-way at the places where it is situated?

A. It forms a cover for the run-way in this sense that it prevents any fruit from going through.

XQ. 82. What do you mean by a cover?

A. My last part of my last answer ought to make it clear to you.

XQ. 83. Please make it clear again.

A. Suppose you put the question again.

Mr. ACKER.—Read the question to the witness.
Question read by the reporter.

A. I could not answer that question any better than I have.

Mr. ACKER.—We will pass it then.

XQ. 84. Does it form a solid bottom for the [665] run-way at the point where it is placed?

A. No, sir.

XQ. 85. What sort of a bottom does it form?

A. Simply an obstruction to keep oranges from going through.

XQ. 86. Is it an open obstruction or a solid obstruction?

A. Explain what you mean by "open obstruction," and maybe I can answer your question.

XQ. 87. Has it openings cut in it or is it one solid piece? A. It is a solid piece.

XQ. 88. About how long and how wide and how

(Deposition of Fred Stebler.)

thick is it? A. About one inch thick.

XQ. 89. About how wide is it?

A. About one inch wide?

XQ. 90. About how long is it?

A. The length of one grading space in the defendant's machine.

XQ. 91. And what is the length of the grading space? A. As I remember it about four feet.

XQ. 92. Can you state the name of the party who first used the filler sticks in connection with your machine?

A. I think Mr. Beatty was the first one to call it to my attention.

XQ. 93. About how often is the filler stick used in connection with the commercial grading of fruit?

A. I have not inquired as to that. [666]

XQ. 94. Made no effort to learn one way or the other? A. No, sir.

XQ. 95. Have you made any efforts to find that out? A. Nothing further than I have stated.

XQ. 96. And those filler sticks were incorporated within the run-way between the rope member and the grading rollers? A. And below.

XQ. 97. Have you ever seen the filler sticks situated in any other portion of the sizer than that in which you have stated it was located?

A. By "portion," what do you mean?

XQ. 98. By portion I mean located in the position which you have stated it was in the machine you examined at the Stewart packing-house.

A. No, sir.

(Deposition of Fred Stebler.)

XQ. 99. I believe you testified that you were familiar with the device of the Ish patent number 458,422? A. Yes, sir.

XQ. 100. That patent was owned and controlled by you or your firm, was it not?

A. At one time.

XQ. 101. Was it not owned by you up to the time of its expiration? A. Yes, sir.

XQ. 102. How does the fixed member of the device disclosed by that patent compare with the fixed member of the reissue patent in suit?

Mr. LYON.—Objected to as indefinite and uncertain and [667] unintelligible in this that it refers to a “fixed member,” it not being apparent what is referred to by such term.

A. I will have to ask you what you mean by “fixed member.”

XQ. 103. I mean by a “fixed member,” what is referred to in the patent in suit as a nonmovable grooved guide.

A. Now, what is your original question?

Mr. ACKER.—Read the question.

Question read by reporter.

A. It compares with it in this way that it is a rigid support for the traveling belt or conveyor for carrying the fruit through the machine.

XQ. 104. And to that extent it is the same?

A. Yes, sir.

XQ. 105. Is it grooved in the same manner as the nonmovable grooved guide in the patent in suit?

A. No, I don't think it is so disclosed.

(Deposition of Fred Stebler.)

XQ. 106. Is it grooved at all?

A. I can't find anything in the patent that would indicate it.

XQ. 107. What constitutes a propelling medium in the Ish patent for the fruit?

A. I assume you mean by that the flat belt carrying the fruit through the machine.

XQ. 108. And the belt is the only thing disclosed in the Ish patent for propelling the fruit?

A. No, sir, I would not think so.

XQ. 109. What other means are disclosed?

A. There is the driving pulley there.

XQ. 110. Did you ever make a machine under the Ish [668] patent? A. Lots of them.

XQ. 111. How did you make them?

A. We used a round belt for a propelling means.

XQ. 112. And what supported the round belt?

A. A rigid support.

XQ. 113. And how did it travel? In reference to the propelling belt, what were the supporting surfaces?

A. The supporting surface was the rigid support under the belt.

XQ. 114. Then the rigid support was grooved?

A. In that case, yes.

XQ. 115. And in that groove travelled the propelling belt? A. Yes, sir.

XQ. 116. Was that a nonmovable grooved guide?

A. Yes, sir.

XQ. 117. And in that nonmovable grooved guide the propelling belt travelled? A. Yes, sir.

(Deposition of Fred Stebler.)

XQ. 118. When was that device made by you, how early? A. I began making them I think in 1902.

XQ. 119. Not before?

A. No, I don't think I made any prior to that.

XQ. 120. And as so made, did you consider it made in accordance with the Ish patent?

A. Yes, sir.

XQ. 121. What constituted the opposite side or opposite [669] member of the sizer of the Ish patent as manufactured by you?

A. You mean in opposition to the belt? The opposite side was constructed of a stepped roll.

XQ. 122. And was a rotating member?

A. Yes, sir.

XQ. 123. What was the function performed by the rotating member of that sizer?

A. It affected the stepped or graduated apertures through which the predetermined sizes were to drop and in addition prevented the fruit from pinching.

XQ. 124. What took care of the weight of the fruit in the Ish sizer or how was the weight of the fruit supported?

A. You mean the supports in the grade-way. It was supported on the travelling belt or on the roller.

XQ. 125. And to that extent, was the fruit supported in the same manner as it is supported in the patent in suit? A. Practically, yes, sir.

XQ. 126. How does the function of the propelling member and of the rotating member of the patent in suit differ from that of the Ish patent, if any at all.

A. In the diameter and independent adjustment

(Deposition of Fred Stebler.)

and mounting of the rollers in the patent in suit.

XQ. 127. In your direct testimony, if I remember it correctly, and if I am incorrect you can correct me, I understood you to ascribe to the rotating rolls of the patent in suit the function of preventing the pinching of the fruit and to the traveling member the propelling [670] of the fruit through the run-way. Is that correct? A. Yes, sir.

XQ. 128. As to this function, how does that differ from that which is performed by the rotating member and the propelling member of the run-way in the Ish patent?

A. So far as it refers to that function alone, there is no practical difference.

XQ. 129. They are substantially the same.

A. Substantially the same.

XQ. 130. How many sections was the Ish device made in? Or I will put it another way. How many rolls were made in the sizer under the Ish patent and what was the length of each roll, if more than one?

A. That question is indefinite and I can only answer in this way. The question refers to how many rolls?

XQ. 131. Yes, if more than one, how many?

A. Originally the machines were made in two grade-ways, or as we call them double graders, in which there would be two ropes in the center of the machine and two rollers one on either outside of the machine.

XQ. 132. That is by two ropes you mean there was a rope on each side of the grooved nonmovable

(Deposition of Fred Stebler.)

guide and a roller opposite each rope?

A. Yes, that is correct.

XQ. 133. Now, was the roller made of uniform diameter throughout?

A. Not in the Ish machine.

XQ. 134. How was it made?

A. It was made in graduated diameters or steps.

[671]

XQ. 135. How many steps?

A. Ordinarily about nine different diameters.

XQ. 136. And that was a continuous piece from end to end when it had nine steps on it?

A. It was in the way it was constructed practically one continuous piece.

XQ. 137. What do you mean by "the way it was constructed?"

A. Although the rollers were constructed in sections they were coupled together in such a manner in the bearings that it constituted a continuous roller.

XQ. 138. You mean there was more than one section to each roller?

A. I think my last answer was exact in regard to that.

XQ. 139. Was each section of the roller of uniform diameter? A. No, sir.

XQ. 140. How was each section of the roller?

A. It was of different diameters.

XQ. 141. What has been termed a stepped roller?

A. Yes, sir.

XQ. 142. How many steps to each?

A. Anywhere from two to five.

(Deposition of Fred Stebler.)

XQ. 143. Two to five on each of what you term sections? A. Yes, sir.

XQ. 144. Do you mean by that description the machine or type of machine which was introduced in evidence by the defendants as the California sizer?

A. Yes, sir.

XQ. 145. What was the length of the run-way in that [672] sizer?

A. Usually they were built in two lengths of grade-way. In the shortest it was about seven and a half feet and the longer one about ten feet as I recall it now.

XQ. 146. Was that ten feet the largest length of the sizer of the Ish type that you know of?

A. It was at that time.

XQ. 147. At what time?

A. At the time I was building them.

XQ. 148. Do you know of any having been built of a greater length? A. Yes, sir.

XQ. 149. How great?

A. Probably twenty feet.

XQ. 150. And how many sizes or grades of fruit would a sizer of that length take care of?

A. Nine grades.

XQ. 151. Is that the same number of grades or sizes taken care of in your machine?

A. Yes, sir.

XQ. 152. Could you make a sizer of the Ish type forty feet long and have a practical machine?

A. You possibly could.

XQ. 153. Please explain a little better what you

(Deposition of Fred Stebler.)

mean by possibly.

A. This is simply a matter of conjecture. I have never known it to be done.

XQ. 154. The largest one you spoke of was twenty-nine [673] feet? A. No, twenty feet.

XQ. 155. Twenty feet?

A. About twenty feet. The longest I have ever known them to be made.

XQ. 156. Can you state approximately, or have you any way of ascertaining or testifying as to the quantity of fruit that was successfully graded on the graders of the Ish type or the California type?

A. No, I have no means of answering that definitely.

XQ. 157. Was it the generally accepted form of grader in this market in Southern California for the sizing and grading of fruit?

A. It was at the time, yes, sir.

XQ. 158. What do you mean by your qualification, at the time?

A. Prior to the advent of the Strain machine.

XQ. 159. Up to the advent of the Strain machine it predominated in this market, is that correct?

A. I don't know that it predominated but it was largely favored.

XQ. 160. And favored in the seven and a half and ten foot lengths? A. Yes.

XQ. 161. And by whom were these machines made? A. I don't know that.

XQ. 162. You controlled the manufacture of it from the time you acquired it up to the expiration

(Deposition of Fred Stebler.)

of the patent? [674] A. I did.

XQ. 163. It was in a suit under the Ish patent that a rope and a belt were held to be equivalents, were they not?

A. Well, I don't know whether we ever called it a rope, a round belt and a flat belt were held to be equivalents in that case.

XQ. 164. The round belt as shown in the drawings of the Ish patent is substantially the same as a rope, is it not? A. It is when they are both endless.

XQ. 165. You don't make any distinction, Mr. Stebler, between a round rope and a round belt?

A. No, so long as they are both endless.

XQ. 166. They both being belts?

A. So long as they are endless.

XQ. 167. The Ish patent, so far as your knowledge goes, was the first of the devices or grading machines for fruit having a nonmovable guide and propelling means working therein and a rotating member opposing the traveling member, was it not?

A. Yes, sir.

XQ. 168. I understand you in your direct examination to testify that you visited the Mountain View Packing-house the packing-house of the Lemon Association, the packing-house of the Stewart Citrus Association. How much fruit was passed over the sizing machines when you had removed one of the driving belts as you have testified to? [675]

A. Just as much as would have passed over it if the belt had not been removed.

XQ. 169. How much was that?

(Deposition of Fred Stebler.)

A. I have no means of knowing that.

XQ. 170. A carload? A. Oh, no.

XQ. 171. A ton? A. No, I don't think so.

XQ. 172. Just a small quantity?

A. Just what would pass at that time.

XQ. 173. That is a very indefinite answer, Mr. Stebler, "what would pass at that time." If the machine had been closed down no fruit would pass, but you were present and observed the operation and should have some approximate idea of the quantity of fruit and that is that I want to get for the benefit of the Court.

A. It might have been anywhere from ten to fifty boxes.

XQ. 174. That is quite a wide limit. Would you say twenty-five boxes?

A. I don't propose to bind myself down to any definite number at this definite time.

XQ. 175. Now, as I understand it was your testimony that it was the third or fourth roll in the sizer?

A. More often the second or third roller.

XQ. 176. The second or third from where?

A. From the intake end of the grader.

XQ. 177. Did you do it with any of the rollers below the third roll?

A. Yes, I think so in one instance it was the fourth or [676] fifth roll.

XQ. 178. And it is at the forward end of the machine where the heavy load comes on?

A. What do you mean by the forward end?

XQ. 179. The feed end or the intake end where

(Deposition of Fred Stebler.)

the fruit comes to the machine? A. Yes, sir.

XQ. 180. I believe in your opening deposition you testified that you had never supplied in connection with the sale of your machine these so called filler sticks, did you so testify?

A. No, I never supplied them.

XQ. 181. What supports the propelling belt in the defendant's machine?

A. The flat board underneath the belt.

XQ. 182. What drives the belt.

A. The pulleys at the end.

XQ. 183. Any connection between the belt and the pulleys other than the surface of the belt itself?

A. I think not.

XQ. 184. Is there a chain, a drive chain in connection with the belt of the Parker machine?

A. In some instances?

XQ. 185. What in the other instances?

A. A rope.

XQ. 186. For the purposes of my question, we will consider the rope and the chain the same, you can answer with that understanding. How is the drive chain connected to the propelling belt? [677]

A. Why in those I saw I think it was riveted.

XQ. 187. And in what does the chain work?

A. It works in the groove at the apex of the angle at the ridge.

XQ. 188. And where is the groove in the Strain device of the patent in suit situated?

A. Underneath the propelling member.

XQ. 189. On the inclined face of that nonmovable

(Deposition of Fred Stebler.)

guide? A. No, not on the inclined face.

XQ. 190. Where is it?

A. The rope is below the inclined face in the Strain machine.

XQ. 191. By reference to the drawing of the Strain patent, point out what you now refer to in Figure 2.

A. I refer to what is indicated by letter "H."

XQ. 192. At the end of the inclined wall?

A. At the end of the inclined wall, as you call it.

XQ. 193. At the juncture of the straight wall surface and the inclined wall surface?

A. I would say that it would be at the juncture of the vertical wall surface with the inclined wall surface.

XQ. 194. How was the weight of the fruit sustained in the defendant's machine?

A. Sustained on the belt, largely.

XQ. 195. And the belt rests on the inclined wall surface or face of the nonmovable structure, does it not?

A. Yes, sir. [678]

XQ. 196. What would be the effect in the apparatus of the Strain device of the patent in suit if the rollers were raised above the propelling rope?

A. Well, if you did not get them too far above it would still perform its function the same as it does now.

XQ. 197. How far do you mean?

A. The diameter of the oranges.

XQ. 198. What do you mean by the expression

(Deposition of Fred Stebler.)

“end-to-end,” Mr. Stebler, what is your understanding of the term “end-to-end”?

A. End towards end.

XQ. 199. End towards end? In other words, if two boards face each other and in longitudinal alignment, they would be end-to-end? A. Yes, sir.

XQ. 200. And it is with that *understand* that you have given your testimony in the present case, is it?

A. Yes, sir.

XQ. 201. I understood you to testify that there was no provision made in the reissue patent in suit for the longitudinal movement of the grading rollers? A. No, I do not find any such provision.

XQ. 202. Do you find any provision in the specifications of the reissue patent in suit for setting the rolls a distance apart? A. No, sir.

XQ. 203. What would be the effect in practical operation of a device constructed with individually adjustable rollers arranged end-to-end, in your meaning of that [679] expression, where the rolls were spaced a distance of eight inches apart?

A. At their ends, I suppose you mean?

XQ. 204. Yes, sir.

A. The question is what would be the effect in practical operation?

Mr. LYON.—Just read the question.

Question read by the reporter.

A. It would operate just the same as it does now in sorting the fruit if that intervening space between the ends of the rollers was closed up to prevent the oranges from dropping through when they reached

(Deposition of Fred Stebler.)

it. You would have to make some provision then to close up the space that would exist between the ends of the rollers.

XQ. 205. Between the ends of the rollers? If you made no provision of that kind, what would be the effect?

A. The fruit would all drop through there.

XQ. 206. Supposing the member opposing the traveling belt consisted of a board or strip running the entire length of the machine and at given intervals there were cut-outs made in that board or wall and a roll put in and the space so presented at the roll made adjustable, would you consider that a series of end-to-end rollers?

A. I certainly would.

XQ. 207. Would you consider that a fruit grader having opposing the traveling member a series of controlled grading apertures?

A. I would if the adjustment of these rolls was such as to make it a practical machine. [680]

XQ. 208. I am assuming in my question that the rolls mounted in that space were adjustable so as to regulate the size of that aperture.

A. You did not so state.

XQ. 209. I say I am assuming that in my question, and with that assumption, your answer is what?

A. It would be a practical machine.

XQ. 210. The question is whether that would be a fruit grader one member of which consists of a series of controlled spaced grading apertures?

A. Yes, it would.

(Deposition of Fred Stebler.)

XQ. 211. And if in each of these grading apertures or spaced grading apertures there was an adjustable roll, under your understanding, it would be a fruit grader one member of which consists of a series of end-to-end rollers, is that correct?

A. Yes, sir.

XQ. 212. And any grader having as one member a propelling means and as the opposing member a series of grading apertures with means within its apertures for varying the same for different sized fruit, and the controlling means being provided with rollers, would, under your construction, be a fruit grader having one member comprising a series of end-to-end rollers, is that correct? A. Yes, sir.

XQ. 213. Is it your understanding of the patent in suit that it is absolutely necessary that the grading rolls be made of uniform diameter throughout? [681] A. No, sir.

XQ. 214. Do I understand you to mean that any form of a grader comprising two propelling members, one of the members consisting of end-to-end rollers with brackets carrying the rolls and means for adjusting them would fall within the terms of the patent in suit?

Mr. LYON.—Objected to as incompetent, not the best evidence the patent speaks for itself, and as incompetent, being addressed to a matter which is for the Court to determine and not a subject of expert testimony.

A. Yes, sir.

XQ. 215. Would your answer hold good irrespec-

(Deposition of Fred Stebler.)

tive as to whether the rolls were made of uniform diameters or of different diameters? A. Yes, sir.

XQ. 217 Have you ever operated or seen operated a sizer constructed under the Strain patent with all of the drive belts for the rollers removed?

A. No, sir.

XQ. 218. Can you state approximately, what weight of the fruit is sustained by the propelling belt of the defendant's machine? A. No, sir.

XQ. 219. Have you ever made an examination of the machine for the purpose of determining that question? A. Not definitely, no.

XQ. 220. Does a machine constructed under the Strain patent, reissue patent in suit, give or permit a greater bin capacity than a machine constructed under [682] the Ish patent? A. Yes, sir.

XQ. 221. And is it or is it not a fact that the greater the length of machine, the greater the bin capacity?

A. Well, not necessarily so although that is usually true.

XQ. 222. And an increase in bin capacity is quite a feature in connection with the fruit industry, is it not? A. Yes, sir.

XQ. 223. And the packers are after increased bin capacity, are they not?

A. Please explain what you mean by bin capacity.

XQ. 224. Increased area and permitting a greater number of packers to be employed and a larger quantity of fruit to go to a given bin.

A. Practically speaking, bin capacity means the

(Deposition of Fred Stebler.)

capacity of any given bin or the amount of fruit it will hold which is not an essential feature, on the other hand area or longitudinal space along which an increased number of packers can be stationed at any given bin is an essential feature.

Mr. ACKER.—That is all I have to ask, Mr. Lyon.

Redirect Examination.

(By Mr. LYON.)

RDQ. 1. In your cross-examination, Mr. Stebler, you have been questioned as to whether or not in the tests that were made on June 12th, 1912, at the various packing-houses, to which you have referred, of the Strain sizer of [683] the patent in suit, without the use of the belt means for driving the rollers, you tried such machines with the belts off of the rollers near the intake end of the machine where the heaviest loads were present on the machine, and stated, if I understood you correctly, that most of these tests were made on rollers near the intake end, where the load of the fruit was the heaviest. Where in such a test would there be the most liability of a machine of this type clogging?

A. The tendency to clog would be greater near the intake end. The amount on the first roller would be more than on the second.

RDQ. 2. What was the reason for testing the second, third and fourth rollers without the belts for positively driving the said rollers?

A. We wanted to test them where the heaviest load of fruit was.

RDQ. 3. Was there any reason for testing the

(Deposition of Fred Stebler.)
first roller without the belt on it?

A. No, not necessarily because the load is approximately the same on the first two or three rollers.

RDQ. 4. Was there any clogging of the fruit on any of these Strain machines or on any of the rollers while the belt was removed?

A. I saw absolutely no tendency to clog.

RDQ. 5. In the defendant's or Parker machine, you have stated that considerable of the weight of the fruit is carried by the belt. Is it a fact that a portion of the weight of the fruit rests against the rollers? A. Yes, sir. [684]

RDQ. 6. What portion, I mean approximately, as to the operation of the rollers?

A. Well, the actual weight of the fruit, as measured by gravity being carried by the rollers in these Parker machines would be very difficult to ascertain, but it is not altogether a question of gravity as it is the tendency of the fruit to squeeze in between the traveling belt and the roll irrespective of the specific gravity. The tendency of the fruit is to squeeze in or down between the roller and the belt.

RDQ. 7. And what does that tendency do?

A. It revolves on these rollers in the Parker machine, keeps them revolving.

RDQ. 8. Outward and away—

A. Outward and away from the traveling belt.

RDQ. 9. When you acquired the Ish patent, were there numerous California graders in use in California? A. Yes, sir.

RDQ. 10. They had been manufactured by previ-

(Deposition of Fred Stebler.)

ous owners of the Ish patent, so far as you know?

A. Yes, sir.

RDQ. 11. Up to that time I understand you had been manufacturing the so-called rope sizer under the Woodward and Cerruti patents, is that correct?

A. Yes, sir.

RDQ. 12. And the California sizer was the standard sizer up to the time that the device of this Strain patent was brought into use?

A. It was the standard rope and roller grader type, yes. [685]

RDQ. 13. And what proportion of the graders in use were of the rope and roller construction at that time?

A. Oh, probably more than half of them.

RDQ. 14. And what percentage are now of the device of the patent in suit?

A. Practically all of them.

RDQ. 15. You have been asked certain questions on your cross-examination in regard to your meaning of the term "end-to-end" and also in regard to the separation of the end-to-end rollers eight inches apart and as to whether such machine would be practical or not and have replied that such a machine would be practical if you filled in the intervening space with some means for forming a side of the runway to carry the fruit along. I call your particular attention to Complainant's Exhibit "Parker Patent," number 997,468 and to lines 61 to 71, inclusive, on page 3 of the specifications thereof, as follows: "The number of sizes of fruit produced in the siz-

(Deposition of Fred Stebler.)

ing or grading operation is manifestly equal to the numbers of grader members provided at both sides of the apparatus; and one or more of such grading members B may be removed from the apparatus or machine or mechanism, the spaces between the same being taken up by the overlapping guide arms 36 which confine the fruit to the proper courses of travel." What do you understand from that description?

A. I understand that the intervening space between the ends of these rollers is filled with obstructions in the form of these overlapping guide arms in such a way as [686] to keep the fruit on the grading rollers.

RDQ. 16. And what do you understand from the portion of the description referred to that Mr. Parker meant in his description of his apparatus as to the distance apart of the rollers and the number of rollers to be used?

Mr. ACKER.—Objected to as incompetent, irrelevant and immaterial and the further ground that the patent itself is the best evidence of the intent of the patentee.

A. I do not understand from this that it made any difference as to the exact distance between the rollers themselves but that all of the sizing or grading; in fact, all of the functions of the machine itself was performed at the grading rollers only.

RDQ. 17. And what do you understand that was, the function of the portion between the rollers?

A. Simply to carry the fruit by from one roller

(Deposition of Fred Stebler.)

to the next over this intervening space, nothing else.

RDQ. 18. It has been testified to, I believe, by some one or more of the witnesses on behalf of defendants that the Parker or defendant's machine would handle more fruit than the Strain machine manufactured under the patent in suit and in accordance therewith by yourself. What are the facts in regard thereto?

A. I think the facts are just the opposite.

RDQ. 19. Do you know? A. Yes, I do.

RDQ. 20. And what are they?

A. The facts are that my machine or the Strain machine can be crowded with fruit and speeded up to a capacity beyond all required limits and still perform [687] its functions just the same as though it were not crowded.

RDQ. 21. Have you found this to be true with regard to machines of your manufacture and like the patent in suit in actual use?

A. Yes, sir, that is a fact.

RDQ. 22. Have you had any complaints in regard to the capacity of the defendant's machine or Parker machine? A. Yes, sir.

RDQ. 23. I show you a document and ask you if you have ever seen it before? A. Yes, sir.

RDQ. 24. When and where?

A. Very shortly after the date it bears. I received it in my mail at Riverside in my regular mail.

RDQ. 25. Under what circumstances?

A. The party writing it simply wrote me, as this letter states, saying that he had one of my machines,

(Deposition of Fred Stebler.)

at least he had one of my machines and he also had one of the Parker machines which was not giving satisfaction and asked me to call and see him with a view of installing another of my machines.

RDQ. 26. Do you know who wrote this particular letter? A. Mr. Switzer.

Mr. LYON.—We offer the letter in evidence and ask that it be marked Complainant's Exhibit "Switzer Letter."

Mr. ACKER.—Objected to as incompetent, irrelevant and immaterial and on the further ground that it is not proper redirect examination. [688]

RDQ. 27. Did you make any investigation of the subject matter of this letter, Switzer letter?

A. Yes, I called on them and took their order for a new machine.

RDQ. 28. Did you install that machine?

A. Why, I installed it last season.

RDQ. 29. What kind of a machine was that?

A. It was a machine constructed in accordance with the patent in suit.

Mr. LYON.—You may take the witness.

Recross-examination.

(By Mr. ACKER.)

RCQ. 1. Who paid for making the application for reissue of letters patent number 12,297, the same being the patent in suit?

A. I don't know, probably I did.

RCQ. 2. It was applied for after you acquired title to the original Strain patent?

A. I think so.

(Deposition of Fred Stebler.)

RCQ. 3. And applied for at your suggestion?

A. No, it was applied for by me at my attorney's suggestion.

RCQ. 4. And you had Mr. Strain make the papers for the application?

A. That being the case that would be true.

RCQ. 5. Is it not a fact, Mr. Stebler, that one of your sizers at the Arlington Heights Fruit Company was replaced by a Parker sizer? [689]

A. I never knew of it if it was.

RCQ. 6. You have no knowledge on that one way or the other? A. I have never heard of it.

RCQ. 7. And you have no knowledge of any sizer of your manufacture being discarded and a Parker sizer substituted therefor?

A. Yes, I have known machines that were practically worn out being replaced by Parker machines.

RCQ. 8. How long had they been in use before they were worn out as you say?

A. About ten years or so.

RCQ. 9. Did you start to manufacture the Strain sizer more than ten years ago?

A. I did not myself.

RCQ. 10. Who did? A. Mr. Strain.

RCQ. 11. Is it not a fact that Mr. Strain only made one sizer? A. No, that is not a fact.

RCQ. 12. Where did he ever install another sizer?

A. He installed one for C. C. Chapman at Fullerton.

RCQ. 13. When?

A. Just after he made the one at the Benchley

(Deposition of Fred Stebler.)

packing-house, and I think that is the one that has been replaced with a Parker machine.

Mr. ACKER.—That is all.

Mr. LYON.—That is all.

Mr. LYON.—Complainant offers in evidence Certified [690] Copy of the decision of the Board of Examiners in Chief, of the United States Patent Office in the matter of Interference number 23,051 of Charles Rayburn against Robert Strain, subject matter, Fruit Graders, involving the application of Charles Rayburn for which letters patent of the United States number 726,756 had been issued and the application of Robert Strain for a reissue patent which eventuated in the issuance of the patent in suit, and ask that the same be marked Complainant's Exhibit "Decision Board of Examiners in Chief."

Mr. ACKER.—Objected to as incompetent, irrelevant and immaterial and not binding in any manner on the defendants in the present action, and not within the issues of the present controversy.

At this point, by consent, the taking of the depositions was continued until ten o'clock A. M. of Thursday, June 20th, 1912.

On Thursday, June 20th, 1912, at ten o'clock A. M. of said day, at the same place and with the same parties present, as noted at the beginning of these depositions, the following proceedings were had:

**[Deposition of Fred Stebler, for Complainant
(Recalled).]**

FRED STEBLER, recalled as a witness in his own behalf, testified as follows, to wit:

(Deposition of Fred Stebler.)

Direct Examination.

(By Mr. LYON.)

Q. 1. I show you copy of letters patent number 741,929, to Charles Rayburn for apparatus for sorting and distributing [691] fruit, granted October 20th, 1903, and ask you if you are familiar with that patent? A. Yes, sir.

Q. 2. Some reference has been made by witnesses in this case to a so-called Rayburn Overhead System. Does this patent illustrate such system?

A. Yes, sir.

Q. 3. And this is the patent under which you stated you put in a few of such overhead systems?

A. Yes, sir.

Mr. LYON.—We offer the patent in evidence and ask that it be marked Complainant's Exhibit "Rayburn Overhead System Patent."

Mr. ACKER.—Objected to as incompetent, irrelevant and immaterial and not within the issues of the present controversy.

Q. 4. I show you a photograph and ask you if you ever saw it before? A. I have.

Q. 5. Do you know what it represents?

A. Yes, sir.

Q. 6. What?

A. It represents a so-called rope grader built under the Woodward and Cerruti Patents and shows, I think, an installation at the Redlands Orange Growers' Association at Redlands.

Q. 7. Does this photograph show what you have referred to in your previous testimony as a rope

(Deposition of Fred Stebler.)

grader? A. Yes, sir. [692]

Q. 8. It is a true representation of it, is it?

A. Yes, sir.

Mr. LYON.—We offer this in evidence and ask that it be marked Complainant's Exhibit "Photo of Rope Grader."

Mr. ACKER.—The introduction of which is objected to as incompetent, irrelevant and immaterial.

Mr. LYON.—That is all.

Cross-examination.

(By Mr. ACKER.)

XQ. 1. Regarding the letter exhibit, Complainant's Exhibit "Switzer Letter," do I understand that the Parker sizer that was in use at the packing-house of the Fernando Fruit Growers' Association was removed and replaced by one of your sizers?

A. I don't know as to that.

XQ. 2. What was your intention in testifying—to convey the impression that the Parker sizer had been removed and your sizer replaced it?

A. No, that was not my intention.

Mr. ACKER.—That is all.

Redirect Examination.

(By Mr. LYON.)

RDQ. 1. In regard to such letter and what was done with respect to such letter, I understood you to state that in response to this letter you installed one of your Strain sizers manufactured in accordance with the patent in suit in this San Fernando packing-house in [693] the fall of 1911. Is that correct? A. Yes, sir.

(Deposition of Fred Stebler.)

RDQ. 2. And at that time, how long had the Parker sizer been in use?

A. One season, I believe.

RDQ. 3. Do you know what became of that Parker sizer? A. No, sir.

Mr. LYON.—That is all.

Recross-examination.

(By Mr. ACKER.)

You did not take the sizer out, did you?

A. No, I did not take it out.

Mr. ACKER.—That is all.

Mr. LYON.—That is all.

[Deposition of Arthur P. Knight, for Complainant.]

ARTHUR P. KNIGHT, a witness produced on behalf of complainant, being first duly cautioned and sworn to testify the truth, the whole truth and nothing but the truth, testified as follows, to wit:

Direct Examination.

(By Mr. LYON.)

Q. 1. You are the same Arthur P. Knight who has heretofore testified on behalf of complainant in this suit? A. Yes, sir.

Q. 2. Since giving your former testimony, have you read the depositions of the witness on behalf of defendants? A. Yes, sir. [694]

Q. 3. Since giving your former testimony, have you had occasion to make any further investigation of the fruit graders in actual operation?

A. Since that time I have seen the Parker grader as well as the Stebler grader in actual operation.

(Deposition of Arthur P. Knight.)

Q. 4. When you refer to the Stebler grader, in your last answer, do you mean the machine embodying the construction and interrelation of parts illustrated by the patent in suit? A. Yes, sir.

Q. 5. Where did you see each of these kinds of graders and when?

A. On Wednesday, June 12th, 1912, I saw both of these graders at Uplands and at Riverside, California.

Q. 6. Did you not also see the Parker grader in operation at Pomona on that date? A. Yes, sir.

Q. 7. The Parker graders that you saw at Riverside were in the packing-house of the Riverside Heights Orange Growers' Association at Riverside?

A. Yes, and at another place in the southern part of the city. I do not recall the names of the packing-house.

Q. 8. At the Riverside Heights Orange Growers' Association you also saw one of the devices of the patent in suit in operation? A. Yes, sir.

Q. 9. And at the Arlington Heights Fruit Company at Arlington Heights, a few miles out of Riverside on June 12th, 1912, you also saw the device of the patent in [695] suit in actual commercial operation, did you not?

A. That is the building with which Mr. Whiffen is connected?

Q. 10. Yes. A. Yes.

Q. 11. Mr. Knight, who was present at Pomona, with you? A. Yourself.

Q. 12. And at Uplands and Riverside and Arling-

(Deposition of Arthur P. Knight.)

ton Heights, who was present with you?

A. Yourself was present at each of these places and as I remember it Mr. Tucker was also present at Uplands and Mr. Stebler was present at each of these places.

Q. 13. Except Pomona, you mean?

A. Well, the last three.

Q. 14. Did you observe the manner of operation of the defendant's or Parker machine particularly at the places named by you? A. I did.

Q. 15. With respect to the functions performed by the rollers of the defendant's or Parker machine, can you state their manner of operation or how they operated?

A. They operated, of course, as the sizing member or limiting member at one side of the grade-way. Further than that, operating as rollers, they turned more or less under the action of the fruit as it passed along in the case of the Parker machine and also in the case of the Strain or Stebler machine whenever the belt was removed. [696]

Q. 16. And what end of the fruit grader is the fruit the heaviest? A. You mean—

Mr. ACKER.—The question is objected to on the ground that this witness during the course of the opening testimony in this case testified that he was not sufficiently acquainted with the fruit industry to testify as to the action of the machine in connection with the grading of fruit and has had no practical experience in connection with the same.

Q. 17. I mean by "heaviest" in this question as to

(Deposition of Arthur P. Knight.)

the quantity and amount of work to be done by the machine.

A. There is more fruit passing necessarily at the initial end of the machine since some of the fruit passes off from time to time as it passes along the grade-way.

Q. 18. Did you particularly observe the action of the rollers in the defendant's or Parker machine at the initial or intake end of the machine?

A. Yes, sir, at that end I noticed on several occasions where the fruit was coming along close together there would be a large number of oranges in contact with a single roller, and under this condition, the roller would turn substantially continuously in a direction upwardly on the side toward the rope or belt.

Q. 19. Did you notice particularly the operation of the Stebler or Strain sizer at the Riverside Heights Orange Growers' Association in this regard, with the belts on?

A. Yes, sir, both with the belts on and with the belts off. [697]

Q. 20. And did you compare the rate of rotation of the rollers with the belts off on such Strain sizer with the initial two or three rollers of the Parker machines as they were in commercial operation in the Riverside Heights Orange Growers' Association's packing-house at Riverside, California, on that day?

A. I compared them in a way as far as my memory would serve me to compare them, not by actual measurement, but by judgment.

Q. 21. And what was that comparison, so far as it

(Deposition of Arthur P. Knight.)

was capable of being determined by observation?

A. That they revolved substantially at the same speed in these first few rollers as if they were driven by belts under the same conditions in the Strain machine.

Q. 22. You say that you saw the Strain or sizer of the patent in suit operated without the belts. Please explain how that was done, where and what were the results.

A. At Arlington Heights we threw off the belt from the first section or roller and supplied fruit liberally to the machine and also sparsely and in such case when there was any fruit passing over the roller it would rotate and the amount of rotation was increased as the amount of fruit delivered to the roller was increased.

Q. 23. What was the direction of the rotation of the roller?

A. Outwardly toward the other side of the grade-way.

Q. 24. Compared with the direction of the rotation when the belt was on, what was the direction of the rotation with the belt off? [698]

A. It was the same.

Q. 25. And at the Uplands houses, did you make any demonstration of the Strain or the graders of the patent in suit by removing any of the belts?

A. Yes.

Q. 26. And what were the results of such demonstrations? A. The same as at Arlington Heights.

Q. 27. To what extent were these demonstrations

(Deposition of Arthur P. Knight.)

carried on as to enabling you to testify from actual experience in the grading of oranges and as to the operation of the Strain device without the use of the belts or other means for mechanically rotating the rollers?

A. To a sufficient extent to satisfy myself that it could be so operated.

Q. 28. If I understand you correctly, this visit was made in view of your previous testimony in this case and the somewhat contradictory character of the evidence of some of the defendant's witnesses in regard to this fact, is that correct?

Mr. ACKER.—The question is objected to as not being a correct statement of the facts of the testimony given in the case.

A. Yes, sir.

Q. 29. Can you give us the mechanical reason why both the rollers of the Parker or defendant's sizer and the rollers of the grader of the patent in suit rotate in the manner described by you without mechanical means for mechanically driving the rollers?

A. It is very evident from the fact that they do rotate [699] that there must be a component of rotary motion at right angles, I should say, transverse to the longitudinal movement of the belt or rope. While I have never investigated the thing mathematically, I should judge that this is due to the oblique rotation of the oranges with reference to the longitudinally moving member, due to the tangential impulse imparted to the orange in longitudinal direction, results in rotation around an oblique axis and this in turn has a component in the transverse

(Deposition of Arthur P. Knight.)

plane, tending to turn the orange in such a manner as to raise the adjacent side of the roller. The whole thing could be worked out by graphic analysis if a person cared to do it, but the operation speaks for itself.

Q. 30. Did you pay any particular attention, Mr. Knight to the defendant's machines in the Riverside Heights Orange Growers' Association's packing-house, at Riverside, as to the manner in which the longitudinally moving belt was mounted.

A. I only remember that it was mounted substantially in the manner of the Parker patent with the central driving member and extending each side thereof.

Q. 31. What was the central driving member.

A. I do not remember whether it was a rope or chain.

Q. 32. Do you remember how this rope or chain was mounted on the central support?

A. It ran at the top of the sizer, but I could not say what it ran in particularly.

Q. 33. You did not investigate whether there was a [700] groove at the apex of the sizer?

Mr. ACKER.—Objected to as leading.

A. I can't say that I did.

Q. 34. Have you examined and are you familiar with the various patents offered in evidence by the defendants in this suit?

A. Yes, sir, somewhat familiar with them.

Q. 35. How long have you been familiar with them?

(Deposition of Arthur P. Knight.)

A. My impression is that I have been familiar with them since last year or so.

Q. 36. As a matter of fact you testified in explanation of them, and of each of them, in the action at law in which Fred Stebler was plaintiff and the Pioneer Fruit Company defendant, is that correct?

A. I know that most of them were in that suit and I was familiar with them at that time and I believe this applies to all of them.

Q. 37. You say you believe it applies to all of them. You do not at this time recollect any of these patents that were not before the Court in that case?

A. No, sir.

Q. 38. Will you please take up these patents now and explain the construction and interrelation of parts therein shown and described and their mode of operation and compare the same, so far as they do show any similarity or dissimilarity with the device of the Strain patent in suit and to the defendant's machine, it being understood that your testimony in reference to what is shown in the Defendants' Exhibit "Bailey Patent" and [701] Defendants' Exhibit "Maull Patent," and Defendants' Exhibit "Nelson Patent," are subject to and without waiving the objection which complainant urged against said patents on the ground that the same are not a part of the art prior to the invention by Robert Strain of the patent in suit and is subject to a ruling on such objection.

Defendants' Exhibit "Nelson Patent," being letters patent number 713,484. This is a machine for

(Deposition of Arthur P. Knight.)

sorting fruit according to quality and the sorting operation is performed by an attendant, the machine not being an automatically operating sizing machine. I find nothing in this patent bearing on the principle of operation of either the Strain machine or the Parker machine.

Defendant's Exhibit "Hutchins Patent" being letters patent number 456,092. This is called an assorting machine, but it is actually a sizing machine and it sizes by passing the fruit along between a longitudinally moving member and a roller, the roller being provided with ribs. The machine comprises a series of superposed elements, two being shown, there being a grading element for each size of fruit. In regard to the operation of any of these elements, the principle of operation is similar to that of the rope and roller graders in general, for instance, the California grader, the Strain grader and the Parker grader, but as a complete machine comprising a series of end-to-end elements, the machine is different in [702] that the elements are arranged one above another instead of end-to-end. This is a good point in regard to compactness, in fact is what the man is driving at but it is fatally defective on one important requirement of a successful grader, viz., longitudinal extension in such machine so as to provide for delivery to packing bins. I therefore conclude that in regard to any single element the principle of this machine is similar to that of the Strain and Parker graders but in regard to the machine as a whole, its distinctive principle is

